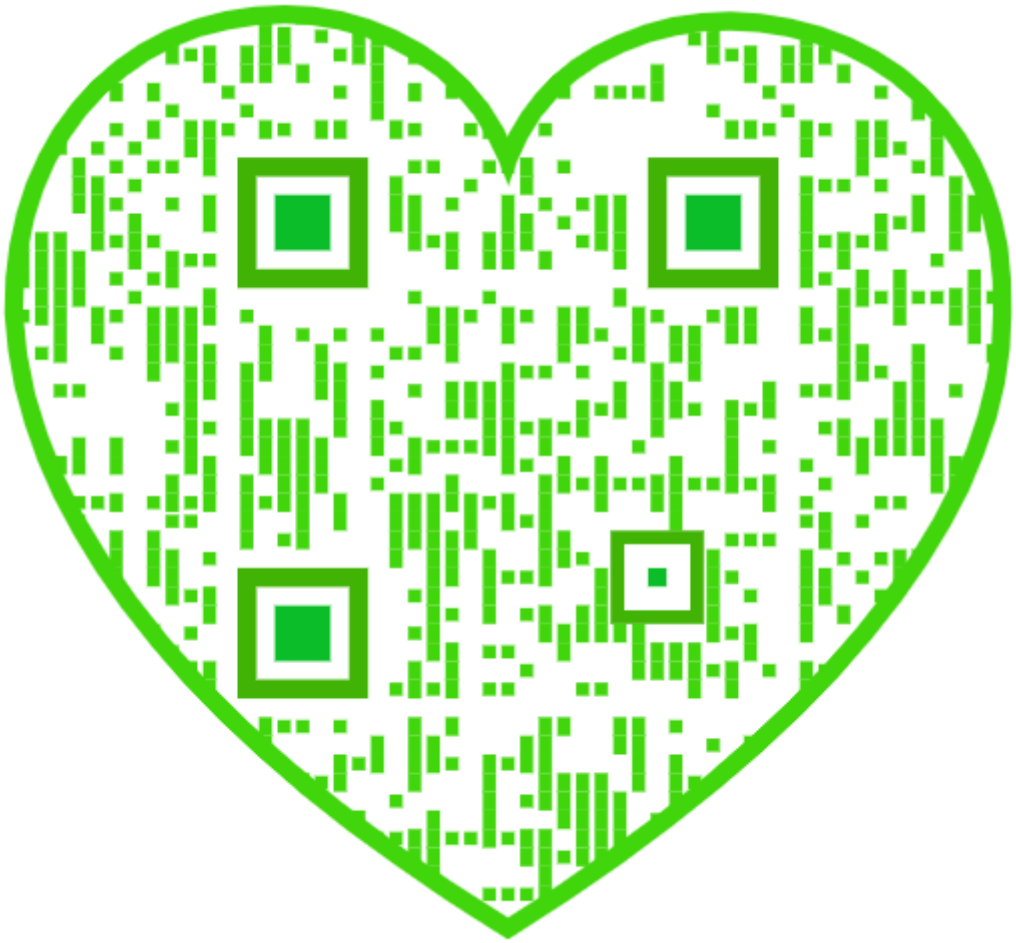

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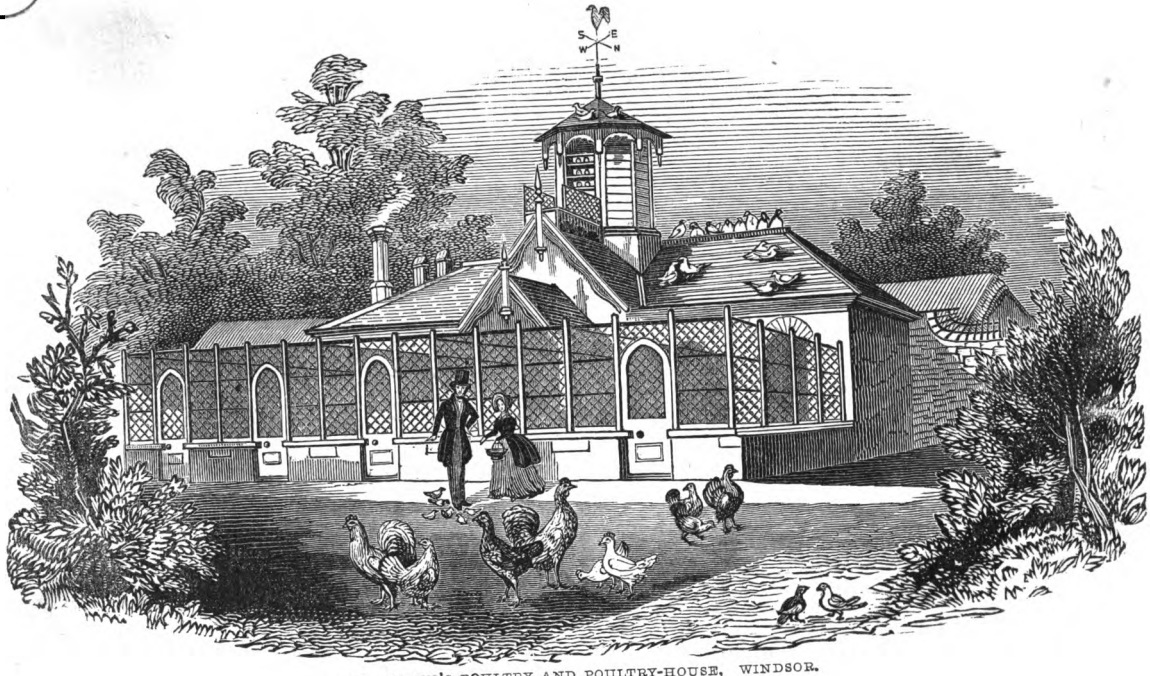


THE QUEEN'S POULTRY AND POULTRY-HOUSE, WINDSOR.

ORNAMENTAL, AQUATIC,

AND

DOMESTIC FOWL,

AND

GAME BIRDS;

THEIR

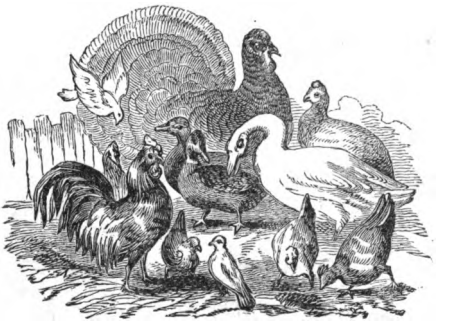
Importation, Breeding, Rearing,

AND

GENERAL MANAGEMENT.

BY J. J. NOLAN.

EMBELLISHED WITH FIFTY HIGHLY-FINISHED ENGRAVINGS.



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DUBLIN:

PUBLISHED BY THE AUTHOR,

AT 33, BACHELOR'S-WALK,

AND TO BE HAD OF ALL BOOKSELLERS.

1850.

Eggs.
Incub. & Poultry in Ontario
7-2 131

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PREFACE.

BEING, for years, an extensive amateur keeper of fine Poultry, Pheasants, &c., as well as all the various sorts of British water-fowl, which gradually led to a very general collection, it occurred to me, that my predilection might be made useful to society, and less expensive to myself, by offering duplicates for sale, by which means, I have been enabled to further increase my stock, and obtain, from personal observation, such information as to their importation, keeping, breeding, rearing and general management, as may be of use to the public; and having been encouraged, by the approbation of the London Zoological Society, who have awarded me many premiums, in competition with all England, Ireland, and Scotland, and been most successful, at all the Poultry Shows, in Ireland, at which I have exhibited, I beg leave to give the public the advantage of my practical experience, and am

Their obedient servant,

JAMES JOSEPH NOLAN.

Bachelor's-walk, Dublin.

DOMESTIC FOWL.

"High was his comb, and coral red withal,
In dents embattled, like a castle wall;
His bill was raven black, and shone like jet;
Blue were his legs, and orient were his feet;
White were his nails, like silver to behold;
His body glittering, like the burnish'd gold."

CHAPTER I.

THE IMPORTANCE OF BREEDING AND REARING DOMESTIC FOWL

Has not been sufficiently appreciated. France, Germany, and the Netherlands were, and still are in the habit of supplying the English market; latterly, the value of the eggs and fowl, sent from Ireland to England, has amounted to more than a million of money, annually; and being kept at home, is a material object, as it is, in a great measure, produced without outlay or expense; and with attention and encouragement, it might be made to treble that amount, and would, therefore, afford additional comfort and emolument to the cottager and farmer. If the thing be encouraged by the landlord, he will ultimately benefit himself, as it will assist the tenant, in the way of meeting his engagements.

POULTRY CLUBS

Are established in most of the principal towns of England and Scotland, for the encouragement of the best breeds; and why not the poultry fanciers, of Dublin, meet and establish a similar society here, Ireland being a much more poultry country than either of the other two? Everything here connected with agriculture, should be encouraged—it is quite conclusive that we have no chance of manufactures; so that everything connected with the farming interest, needs our utmost support. If such

societies were commenced, with periodical shows, under the auspices of respectable, competent, and uninterested judges, the thing could be made most valuable, the fanciers would have a knowledge of where good fowl were to be had, and the trash that has latterly been exhibited, would be excluded. Such societies, respectably got up, and fairly carried out, would be of immense utility; they are in every town of note in England. Our abundant potato crop, of former years, caused an accumulation of fowl, and since the blight, it has been discovered that there is no substitute for it, as a feeder of pigs or poultry, the small, or refuse, with the insectivorous and vegetable matter found along the ditches and hedges, with dropped corn and grass seeds, affording an abundant supply; and where there is a convenience to keep waterfowl, the aquatic plants, and coarse grasses, rejected by other animals are their favourite food, and consequently they are produced at the least possible expense.

If the gentry would procure some fine specimens of Cochin China, Malay, Chittagong, Spanish, or Dorking, and give, or exchange their eggs, with their tenants, they would do an infinity of service. My much regretted friend, the late William Reilly, Esq., of Belmont, Mullingar, was one of the first, of the gentry, I had the honour of supplying with fine poultry, and never was the thing turned to better account; if any of his tenants brought a clutch of common eggs, into his farm-yard, they had, in exchange, for them, some of the finest Dorking, Spanish, or Aylesbury duck's eggs, and those poor people realized as many shillings for their fowl, as they had before sold them for pence—he was a true benefactor, and a worthy, upright, and intelligent gentleman, above paltry pretences; I fear we shall "not look upon his like again." If our gentry would follow his example, and assist, instead of persecuting the poor, there would be a better understanding, all over the country, and they would be, as he was, respected, beloved, and venerated, and the strength and sinews of the land would not be crossing the Atlantic.

"Ill fares the land, to various ills a prey,
Where wealth accumulates and men decay;
Princes and lords may flourish, or may fade,
A breath can make them, as a breath has made,
But a bold peasantry, a country's pride,
If once destroyed, can never be supplied."

The brief narrative of the different sorts of fowl, given in the following pages, will enable the breeder of poultry to select his stock; it is, therefore, unnecessary to give advice on that subject,

under this head. But in order to give some idea of the importance of the subject, I shall take leave to make a few extracts from the most authentic sources on the subject, of the profit obtained from eggs and poultry.

A writer in a newspaper, some years ago, at Arras, enters into the following calculations, as to the value of this branch of trade:—"Out of 72,000,000 eggs, annually imported into England from France, Germany, the Netherlands, and other countries, France contributes 55,000,000; calculating the first cost at 4½d. per dozen, England pays annually to France for eggs, about £77,000." A writer in the *Penny Magazine*, in the year 1837, calculates the importation of eggs, from all sources, at 69,000,000, for the year ending January 5, 1837; and the duty, at 1d. per dozen, amounted to £24,048. In 1820, the quantity imported was 31,000,000; the duty yielding a revenue of £11,077. In 1827, the importation of eggs was nearly the same. "These 69,000,000 eggs required about 575,000 fowls, each producing 120 eggs, on an average; all beyond this being required for domestic consumption. Assuming the grounds of this calculation to be correct, the 55,000,000 eggs, supplied by France, are the production of 458,333 fowls, each of which furnishes ten dozen eggs, imported at a duty of 10d., being a tax to that amount on each fowl. Allowing twelve fowls to each family, engaged in supplying the demand for eggs, the number of families thus interested will be 39,861, representing a population of 198,000. In the Pas de Calais there can scarcely be a larger proportion than two families out of every five who are connected with the egg trade; and, if this were ascertained, to be the real proportion, the population, not directly, engaged would be 457,000, which, with the 198,000 mentioned before, would comprise a total population of 655,000, which is the population of the department." The usual mode in which these eggs arrive at the market, is, through the intervention of an intermediate class of dealers, who go from house to house, visit cabin after cabin, collecting from each, the accumulated store; and, in their turn, bring the produce of their tour, to the egg *merchant*, who regularly ships them, for their destination.

Mr. Weld, in his "Statistical Survey," of Roscommon, thus writes—"The trade in eggs, the value of which for export, according to Mr. Williams, in 1832, amounted to £500 a day, paid by England to Ireland, is carried on, with considerable vivacity, at Lanesborough, and also at Tarmonbarry. The eggs are collected from the cottagers for several miles around,

by runners—commonly boys from nine years old and upwards, each of whom has a regular beat, which he goes over, daily, bearing back the produce of his toil, carefully stowed in a small hand-basket. I have frequently met with these boys, on their rounds, and the caution, necessary for bringing in their brittle ware, with safety, seemed to have communicated an air of business and steadiness to their manner, unusual to the ordinary volatile habits of children in Ireland. I recollect one little barefooted fellow, explaining that he travelled, daily, about twelve Irish miles (above fifteen English miles). His allowance, or rather his gain, was one shilling upon every six score of eggs brought in—the risk, purchase, and carriage resting entirely on himself. The prices vary from time to time, at different periods of the year; but they are never changed, without previous notice to the runners. In the height of the season, the prices, at Lanesborough, were from 2s. 6d. to 4s. per 120; but towards the winter they rise to 5s. The eggs are packed in layers with straw, in such crates as are commonly used for the conveyance of earthenware. Each crate will hold about eighty-four hundred, of six score—that is, 10,080 eggs, the first cost being from £10 10s. to £16 6s. per crate. These are sent forward, on speculation, to Dublin, or, occasionally, at once to the English market, and a profit of £4 or £5 per crate, is considered a fair remuneration. Sometimes it is more, and sometimes it is less, and there is risk in the trade. From Lanesborough the crates are sent over-land to Killashee—the nearest place on the line of the Royal Canal—and forwarded by the trading boats to Dublin. At Tarmonbarry I saw several cars come laden with crates of eggs, from the neighbouring districts, on each side of the river."

The following statements by M. Legrand, a member of the French Statistical Society, on the production and consumption of eggs, in France, may not prove uninteresting: "In 1813, the number of eggs exported from France was 1,754,140. Between 1816 and 1822, the numbers exported rose rapidly from 8,733,000 to 55,717,500; and in 1834, the number had increased to 90,441,600. In 1835, 76,190,120 were exported for England; 60,800 for Belgium; 49,696 for the United States; 42,960 for Switzerland; 34,800 for Spain; and 306,304 to other parts of the world. The total amount of the exportations for the year was 3,828,284 francs. The consumption in Paris is calculated at 115⅝ eggs per head, or 101,012,400. The consumption in other parts of France, may be reckoned at double this rate, as in many parts of the country, dishes composed of eggs and milk, are the prin-

cipal item in all the meals. The consumption of eggs, for the whole kingdom, including the capital, is estimated at 7,231,160,000; add to this number those exported, and those necessary for reproduction, and it will result that 7,380,952,000 eggs were laid in France during the year 1835."

M'Culloch, in his *Dictionary of Commerce*, states, that France exported, for the consumption of London and Brighton, alone, upwards of £76,000 worth of eggs; and this branch of commerce has, at least, doubled, since the period, when M'Culloch wrote.

T. Rutherford, Esq., has favoured me with a copy of his Essay on the Progress of Agriculture, read by him at a meeting of the Royal Dublin Society, in which he says, there were exported from all Ireland, in 1835—

	Quantity.	Value.
Number of eggs . . .	52,244,800	£87,352
Crates	275	37,600
Boxes	10,625	31,037
Total		£155,989

No mention was made of fowl; but 6,432 cwt. of feathers were exported in the same year, valued at £32,666. In the memoir published with the "Ordnance Survey," it is stated, that from the town of Londonderry, alone, are annually exported £60,000 worth of eggs.

I have had a statement furnished me by P. Howell, Esq., Secretary to the City of Dublin Steam Packet Company, to the following effect:—The number of boxes shipped by that company's vessels, for London, during the years 1844-5, was 8,874; about the same number was shipped by the British and Irish Company; making a total of 17,148 boxes; each box contains 13,000 eggs, but occasionally large boxes are used, containing more than four times that number. This gives the result of 23,072,400 eggs, as annually shipped for London. To Liverpool were shipped 5,135 boxes, containing 25,567,500 eggs, making a total of the shipments from Dublin alone, during the past year, to the two ports, of London and Liverpool, of 48,639,900, the value of which, at the average rate of 5s. 6d. per every 124 eggs (the return made), gives a sum amounting to about £122,500, as the annual value of the eggs, shipped from Dublin alone, and since this return the export of eggs enormously increased. The other ports ship their own eggs; and assuming the export of Dublin to be equal to one-fourth of the exports of all Ireland (a calculation reaching much above the mark), we have very close on £500,000 or half a million

sterling, as the value of this branch of commerce to Ireland, showing also, an increase of *four-fold* since 1835.* No return has been kept of the number or value of the *poultry*, that have, living or dead, been exported from Ireland; but it has been ascertained, beyond all possibility of doubt, that this branch of commerce has been, of late years, greatly on the increase—a natural consequence of the introduction of the superior foreign varieties of fowl.

By the foregoing extracts, it will be perceived that the breeding and rearing of poultry, and the collection of eggs, is of much more importance, than is generally supposed. The question is, should we sit down quietly and permit France, to put in her pocket, £150,000 annually, which ought to be returnable to England or Ireland, if her gentry would but promote, and encourage the breeding and rearing of poultry at home, and add to the comforts of the cottagers, and profit to themselves?

CHAPTER II.

THE ORIGIN OF OUR DOMESTIC FOWL

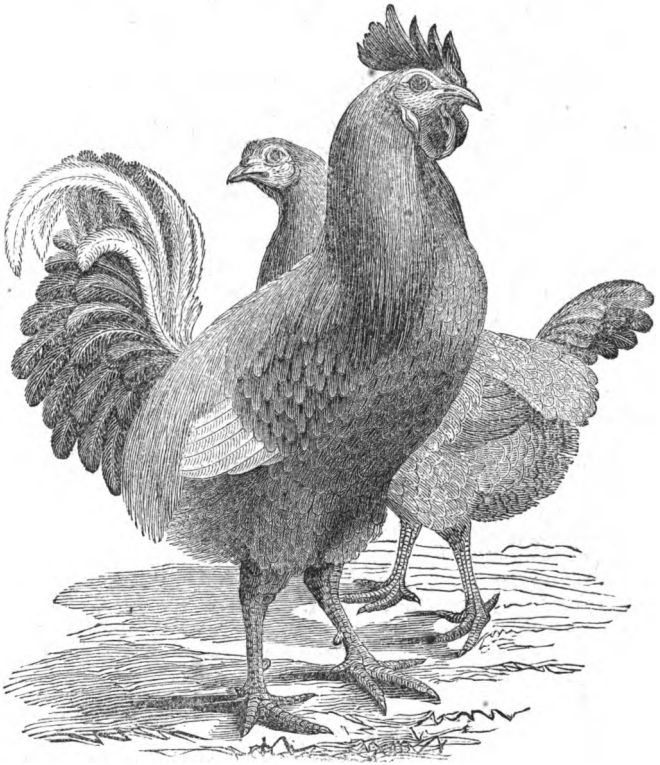
Is involved in such uncertain obscurity, I shall not trouble my readers by repeating what has been so often advanced; it is nearly on a par with the assertions of some of our *Savans*, who undertake to tell us what has occurred before the creation of man. I shall therefore omit it, and proceed to detail the facts we are in possession of, and commence with the description of

THE COCHIN CHINA FOWL.

They were presented to our most gracious Queen, and afterwards bred at Windsor Great Park; and in order to promote their propagation, given, by Her Majesty, to such persons as she supposed likely to appreciate them. I have been fortunate in procuring some fine specimens from them soon after their arrival. Three of the Queen's birds were exhibited at the Royal Dublin Society's show, for 1846, which elicited the gold medal; but they were evidently crossed by the Dorking, as evinced by their general appearance, and being partially furnished with the additional toe—a

* By the same returns, I have ascertained that the export of eggs is now nearly doubled—viz., bordering on A MILLION STERLING.

circumstance admitted by Mr. Walter, the Queen's poultry-keeper. This lot was subsequently presented to the then Lord Lieutenant of Ireland, Lord Heytesbury. At the same show, I exhibited the first Cochin China fowl, of pure breeding, in this country. The annexed figures are taken from them, by Mr. William Oldham.



THE COCHIN CHINA FOWL.

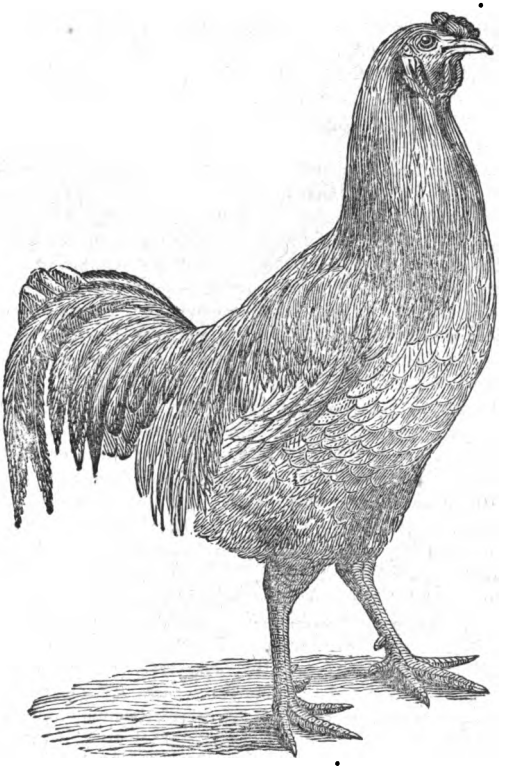
I was awarded the society's premium for the Cochin China I exhibited in 1846, 47, and '48, and if productiveness, and great

size, be a desideratum, they are entitled to every encouragement. Their flesh is white and juicy, and of delicate and fine flavour. They are a close-feathered bird, and require to be handled in order to ascertain their size and weight. They are most prolific layers, and when full grown, produce eggs of more than ordinary size. James Walter, of Windsor, bears testimony of their productiveness. Two hens and a cock sent to an English lady, from my stock, have been described by their present owner, in the *Gardeners' Chronicle*, of 30th Sept., 1848.

The weight of fowl, given in a recent English publication, seems, for first-class birds, ridiculously small, in comparison to ours—a circumstance which I shall have occasion to refer to, as I proceed. Since their first introduction here, they have very much increased, but the demand for them, particularly in the English market, has thinned my stock. Full-grown cocks, from one and a half to two years old, average a weight of from 10 to 12 lbs.; the hens from 8 to 9 lbs. The male bird stands about 2 feet high; the female about 22 inches. The plumage of the cock figured above is black-breasted red; they are brown-breasted, and sometimes of a lighter colour; the hens are generally of a Rufus yellow, or incline to a Rufus brown, sometimes speckled, and are wide on the breast and back; the cock's comb is usually single, serrated, and erect, of a brilliant scarlet, but not always single; I have had both single and double combs in the same clutch; the wattles are large; they are quite free from top-knot; the hackles on the neck and hips, yellowish brown; the tail black, with metallic lustre, and when fully furnished presents the usual cock's plume; the legs vary from a flesh colour to an orange yellow, and are not so long as in the Malay; the eggs are generally buff-coloured, of large size, and blunt at the ends; the chickens progress rapidly in size, but feather slowly: so that an early clutch would be most valuable, as passing through the milder summer months. I cannot discover the doubling of the wings, or horse-shoe markings, described by some writers, in any of my stock I think if it did exist, it was purely accidental.

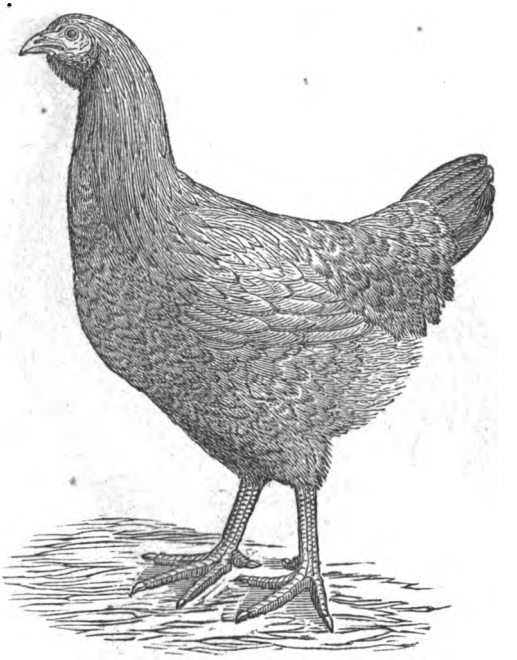
THE MALAY FOWL,

From geographical situation, size, and general deportment (after the Cochin China fowl), is entitled to the next consideration of the amateur or poultry-keeper, whether for pleasure or profit. They are a majestic bird, and are imported from the peninsula from which they take their name; their weight, in general, exceeds



THE MALAY COCK.

that of the Cochin China, the male bird weighing from 11 to 13 lbs., and the female from 9 to 10 lbs.; height rather more than the Cochin China—say, twenty-four to twenty-six inches, being higher on the legs—the hens about twenty-three inches.* The plumage is very various, being from black to white; the more general colour of the hens is a light, reddish yellow; the cock has a small, misshapen comb, sometimes inclined to one side, and he should be what is called snake-headed, and perfectly free from top-knot; wattles small; the hackles do not deserve any



THE MALAY HEN.

particular notice, being of the various hues of this many-coloured tribe; the tail is small, and ill-furnished, in proportion to the size of the bird; the legs are black, blue, yellow, or white, occasionally —the latter colour being the greatest favourite. The eggs of the young birds appear small for the size of the pullets, but full-grown hens produce reasonably large ones; the chickens feather slowly, and require to be brought out at the early season. They are a most invaluable cross to our common domestic fowl, producing a large and hardy variety, which are excellent layers and sitters, and well calculated for the table and "improvement of the cottager's breed;" the poultry-keeper who looks to profit, should not be without some of them, in addition to his ordinary stock. It is to the introduction of this variety, that we have to attribute the extraordinary increase

in the export of living and dead poultry, from our ports, for the supply of the English market.

The first Malays I brought to Dublin, I purchased in the London docks. They were brought direct from the Peninsula, as good specimens, and were the progenitors of all the fine Malays, I have since forwarded to every part of England, Ireland, and Scotland. The cock and hen were both a reddish yellow. I can clearly trace all the prize Malays, exhibited here, to them.

There is a large bird, well known here, with a slight top-knot, said to be Malay, which is evidently a cross.

I have been favoured, by Thomas Rutherford, Esq., of Merrion-square, with a copy of a very clever paper, alluded to in the first chapter, displaying undoubted ability, and research, and read by him, at a scientific meeting of the Royal Dublin Society, the Earl of Clancarty presiding, in which he gives the following description of the Malay:—

"The handsomest of the Malay, are generally black-breasted, with red hackles, and wings of the same colour, and the rump and tail black, resembling the plumage of the common game cock; and the hens brown, like the game hens; there are also gray, with reddish hackles and wings; these are very often larger than the former, but they are not so well proportioned; both are awkward in the gait; they fatten to an enormous size—as large as small turkeys. I once had a cock which weighed alive, without being fattened, 13 lbs."

Having both the varieties described above, by Mr Rutherford, in my possession, I fully coincide in his opinion.

There is a bird recently described, as the Pheasant Malay, and weighing only 7 lbs., which has not the slightest claim to originality, being a mere accidental cross, between the true Malay, and birds bred in the north of England, by the members of the poultry clubs, for show of feather, and described by them as mooned, creeled, or pheasant fowl, of which I shall have occasion to speak in their proper order; they deteriorate the value of both birds, by reducing the size of the Malay, and obliterating the beautiful markings of the pheasant fowl; they are a purely accidental cross, and not purposely bred by the fanciers of either variety, but there is no doubt of their being an excellent table fowl, as most crosses of the Malay are. It is a mere market appellation of the dealers, who too often endeavour to make sales at the risk of veracity, assuring their buyers that they are half pheasant; and, with few exceptions, a more deficient set of men, as to the knowledge of the article in which they deal, there does not exist.

None but the veriest dupes, now suppose that our domestic fowl have a continuous cross of the true pheasant; the hybrid birds produced between them, cannot be mistaken, having very much the appearance and character of the true pheasant, and with it ceases all further propagation.

THE CHITTAGONG,

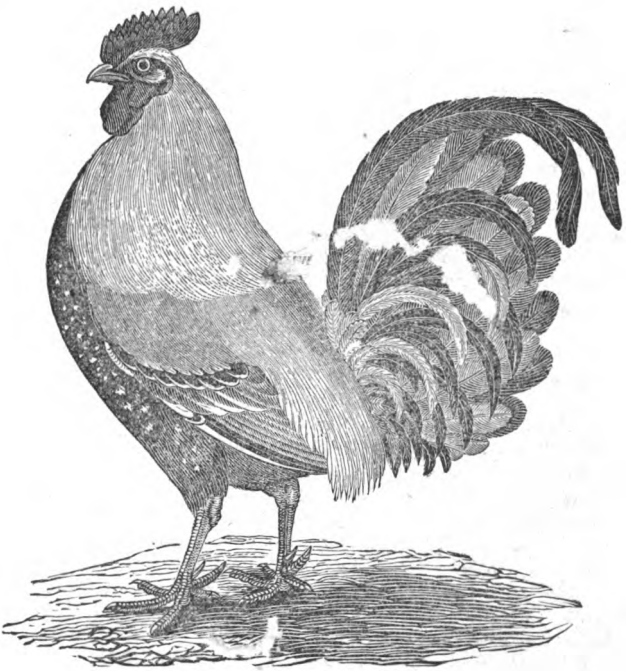
Another eastern variety, frequently confounded with the Malay; there is no doubt of their being a distinct species; the colour is uniform, or nearly so; not so fine as the Malay; they are large in the body, and short on the legs. They do not stand so high as either the Cochin-China or Malay; the cock stands, in his ordinary way, about 22 inches in height, and the hens about 20 inches; the weight of the cock is from 8 to 10 lbs., and the hens from 6 to 7 lbs.; the plumage is uniformly speckled gray, or what some understand as cuckoo-coloured, with large comb, free from top-knot, with ordinary-sized wattles; hackles partaking of the same mottled gray of the rest of the plumage; the tail is small in proportion to their size; the legs vary, being occasionally white, blue, or yellow; the eggs are large and abundant; the early chickens advance in size and plumage with as much rapidity as our common poultry. There is no doubt of their being crossed on the Dorking, which fowl they much resemble in shape, and then produce what is denominated the gray Dorking; they are a large-sized, hardy, and very valuable bird.

THE TRUE DORKING,

COLOURED DORKING—FIVE-TOED DORKING.

What we want, and expect, in the Dorking, is size, and the coloured birds have it, in perfection.

Giving the Rev. Mr. Dixon, of Norwich, author of "Ornamental and Domestic Poultry," every credit for his learning and research, it occurs to me, that he has not put himself in possession of correct information, as to the entire subject, on which he proposes to enlighten us. The humblest cottager in Ireland would smile at the idea of a learned English ornithologist, stating that his specimens of "fine Dorking fowl" weighed only 7 lbs. each, while our roadside birds can be had from 7 to 9 lbs. The cock



THE TRUE DORKING.

figured above, now in my possession, *out of condition* and *in heavy moult* weighs 10¼ lbs.; if fed, and over moult, would be at least 2 lbs. more.*

What would William Ogleby, Esq., late Honorary Secretary to the London Zoological Society, say, to fine Dorking being only

* "Mr. Nolan brought the cock figured above, to our office, on the 23rd January, when we had him weighed; the bird was in moult, and his condition much reduced. He weighed, in that state 10¼ lbs., and we have no doubt that when in full plumage and condition, he will weigh nearer 14 lbs. than 12. We can also state from our own knowledge, that the common roadside cock, even in the wildest districts in Ireland, would weigh, alive, from 7 to 9 lbs."—Ed. *Farmers' Gazette.*

7 lbs. weight? He is a breeder and promoter of Dorking, on his Irish estate, for his own use, and the benefit of his tenants. I have been favoured with young birds, from his stock, of six months old, of 8 lbs. weight, although the Dorking does not come to full growth till two years old. My late lamented friend, Charles Steel Bompass, Esq., secretary to the same society, has put me in the way of procuring the finest Dorking in Great Britain. The foregoing bird is from the stock, procured through him.

I have no doubt but these facts will furnish our learned author with the materials for another facetious Yankee story; and I assure him that no persons can enjoy a joke with more gusto than my countrymen, in whatever grade of life.

The hens are from 7 to 9 lbs., they stand low on the legs; the cock about 22 inches, and the hens about 20 inches, with short, round, plump body, wide on the breast and back, with abundance of white and juicy flesh; nothing to surpass them as table fowl; the plumage gray or speckled, or striped, and sometimes red; the cock's comb in some birds large, serrated, and erect; in others large and rose-shaped; wattles large, should be free from top-knot; hackles vary according to colour; tail presenting the plume, if in good feather; legs short, white or blue; feet with the distinctive markings of an additional toe; eggs abundant, but not large according to the size of the bird; chickens easily reared, and come to perfection sooner than any other poultry. They have taken their name from a town in Surrey, in which they were abundant, but from the demand, have become scarce, and it is now difficult to procure good specimens from that locality. The early writers on poultry describe "a large breed of fowl, with five toes, as good layers and sitters," which may have been the progenitors of our modern Dorking. An amateur breeder of the five-toed fowl, assures me he brought them from Normandy, where he says they were to be had, previous to their appearance in Surrey. There cannot be any fowl better calculated to add to the profits of the farm-yard, from their abundance of flesh and small offal; they are hardy, naturally climatized, and are, as their progenitors are described, "good layers and sitters," but heavy on the nest. Breeders will find it necessary to introduce, occasionally, fresh blood into their stock of Dorking, or indeed of any other fowl, otherwise they become unhealthy, and degenerate into a dwarfish size; and if you expect productive eggs, do not give more than four or five hens to a cock. These are the fowl usually emasculated in England.

There is another variety of poultry with five toes—

THE WHITE DORKING,

A very handsome little bird, purely white, but better calculated for ornamental than useful purposes, being to the coloured Dorking, as the Bantam is to the ordinary fowl, and sent to market as a substitute for chickens; they are furnished, as in the large variety, with the supplementary toe, but can bear no comparison, as to value, in any respect; the cock's weight is about 4 lbs., and the hen's about 3 lbs.; the cock stands about 15 inches high, and the hen about 13 inches; the plumage invariably white; the comb occasionally, as in the large variety, single, or rosed, free from top-knot; fair proportioned wattles, the hackles white, the tail plumed, legs white, flesh delicate and chickeny, eggs small, chickens handsome, but delicate. I can only recommend them for the fancy; they look beautiful on a lawn.

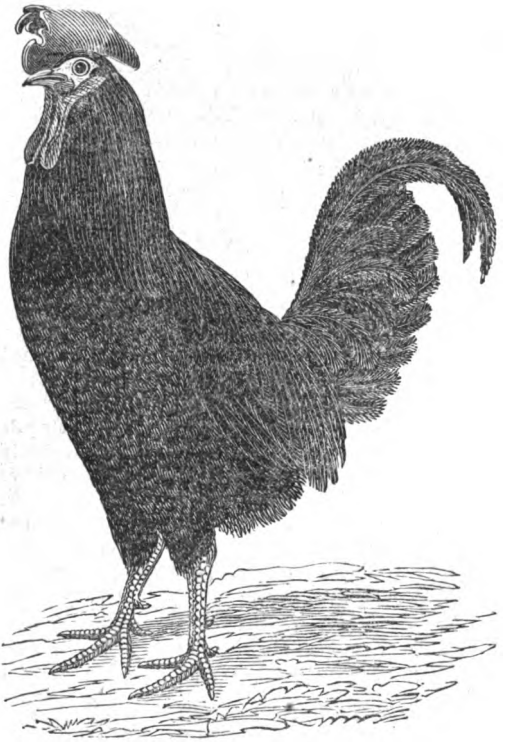
THE OLD SUSSEX, OR KENT FOWL,

Is so nearly allied to the Dorking as to be almost impossible to separate them; they may be called identical, as it frequently happens that, in the same clutch, some of the birds have five toes, while others have but four; those with the five toes being denominated, by the breeders, Dorking, and they designate those with only four toes, the old Sussex. Many fanciers prefer the old Sussex to the Dorking, considering the additional toe as rather a deformity, and when much projecting, liable to accident. They are of all the various colours of the Dorking; the description of that bird may, in every particular, be applied to them. They require, as in the Dorking and other fowl, fresh blood introduced, or they become degenerate.

THE SHAKEBAG,

Or Duke of Leed's fowl, said by Mowbray to be extinct, should take its place after the Dorking and Sussex, being the next in size; but it would be tedious and unnecessary to take up the reader's time, by describing a fowl which he may never have an opportunity of seeing; I shall only speak of the circumstance from which it derived its name. His grace of Leeds, being an enthusiastic cocker, was in the habit of challenging his cocks, being

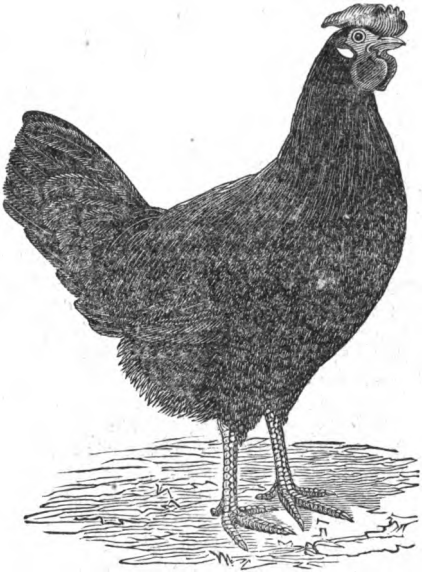
brought to the pit in a bag, against any that could be produced, and when shaken out, from their superior strength and size, were found more than a match for any competitor, and were afterwards denominated Shakebags. They were supposed to be a cross of the Malay and the true British game.



THE SPANISH COCK.

THE SPANISH FOWL,

Now so well known, but very scarce, indeed, when I first imported them from Holland, are acknowledged to be a superior



THE SPANISH HEN.

bird, in every particular. Although called Spanish, it is rather a misnomer. They were originally brought by the Spaniards from the West Indies; were, for some time, successfully propagated in Spain, but it is now most difficult to procure good specimens from that country. I have had my fowl, as above stated, from Holland, where they breed all the different sorts of poultry, perfect and distinct, but have no doubt of their having been brought there from Spain. When I first introduced them into the show-yard of the Royal Dublin Society, their exhibition of poultry consisted of a very few baskets of hens, tied by the legs, to the manifest torture of the spectators, as well as the birds, since which their exhibition has become most extensive and creditable, and worthy the consideration of royalty. At the Dublin show, for 1848, there were exhibited more than two hundred lots of the different sorts

of fowl, of three birds each, partly shown in one hundred and twenty pens, got up at the expense of the society, to which I added fifty pens of my own; but so extensive was the exhibition, there was not near sufficient accommodation for the different lots of fowl.

I take the Spanish to be a truly distinct variety, and everything experience can acquire of it, adds to its character of originality. A full-grown cock weighs about 7 lbs., the hen about 6 lbs.; the cock stands about 22 inches high, and the hen about 19 inches; the plumage a beautiful, glossy black. I have seen some birds showing the appearance of the highest breeding, perfectly white, some of which have lately come from Spain; the comb is serrated, and so large as to usually fall at one side; the hens are combed equal to ordinary cocks, drooping to one side, of vivid scarlet; wattles long; ear-lobes white; cheek white, but added to by age; quite free from top-knot; hackles black; tail splendidly plumed; legs blue; flesh and skin beautifully white and juicy; is a first-rate table fowl; eggs white, large, and abundant; chickens grow rapidly, but feather slowly. They are not very pugnacious, if kept together, but if separated, even for a day, they cease to associate quietly with their companions. The hens are not inclined to sit, which is, perhaps, an Irish cause of their becoming so abundant; they are everlasting layers, and their eggs are usually hatched out by the common poultry. They are now to be had in every quarter; indeed, they are so splendid a bird, that I consider it a crime against domestic economy, to have a Spanish hen's time taken up with hatching and rearing chickens, when she might be adding to the stock of her own genus, by her egg every day.

I am not an advocate for cross-breeding of any sort, and shall, therefore, beg to remark, that there are many spurious crosses attempted to be made on the Spanish fowl, which should not be encouraged.

THE COLOMBIAN FOWL

Is the nearest proximate to the Spanish; they are a larger bird; stand higher on the legs; of upright deportment; the cock weighs 8 lbs., the hen 6½ lbs.; the male bird stands twenty-two inches, and the female twenty inches; the plumage black, with metallic lustre, the comb large, serrated, and erect, sometimes double; wattles long; ears, cheeks, and throat tufted with feathers, free

from top-knot; hackles shining black; tail inclining towards the head, but plumed; legs blue or black, flesh white and delicate, eggs of an extraordinary large size, chickens easily reared. The well-known philanthropist, C. B. Newenham, Esq., of Dundanian Castle, Cork, who has done so much towards alleviating the distresses of the south, and in promoting the renewal and cultivation of the potato, first introduced those birds, from South America, and has favoured me with some splendid specimens. A. W. Baker, Esq., of Ballytobin House, near Callan, had them from me, and produced a splendid lot of beautiful chickens, from them, at the last Kilkenny Agricultural Show. They are found to be good layers, of the largest eggs of the whole poultry tribe, and the chickens easily reared. They can with confidence be recommended as first-rate layers of the largest eggs, good sitters, good mothers, and excellent table fowl.

THE BLACK POLISH FOWL,

With white top-knot, cannot be confounded with either of the preceding, though of equally black, metallic plumage. The contrast of their beautiful white top-knot with their black coat, at once distinguishes them from any other fowl. They are truly ornamental, lay abundantly, a moderate-sized egg. It is difficult to say from whence they originally came. The best specimens, of the present day, are procured from Holland. The cock weighs about 6 lbs., and the hen about 5 lbs.; the male bird stands about 20 inches, and the female about 18 inches. The beautiful white top-knot, of a well-bred cock, is parasol-shaped, hanging down over his beak and eyes, fronted with a few black feathers; the comb, as in all highly-crested fowl, is diminutive, and consists of two small points, close to the beak; wattles short and round; hackles, as the rest of the plumage, black; tail with the cock's plume; legs blue or black; skin and flesh white. No difficulty in rearing the chickens.

WHITE POLISH FOWL.

Doctor Bechstein, the well-known German author, describes a purely white fowl, with black top-knot, to be had in his country. Those birds I have never seen, but have been told that they did exist here. I can find no trace of them, now, in Great Britain

I have written to more than one correspondent in Germany, to procure them for me, at any cost, but without success; so that I must presume they are not now to be had, even there.

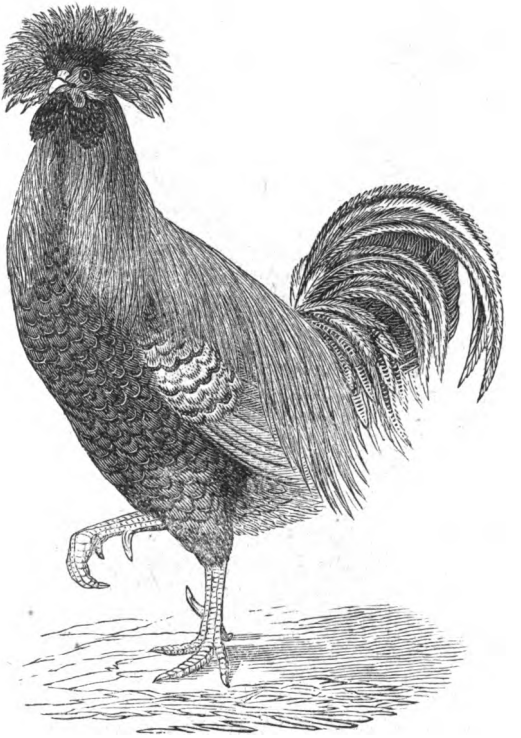
My applications to my continental friends, procured me some splendid specimens of

THE SPANGLED POLISH FOWL,

Which are, at present, very rare, and always very beautiful; when purely bred, they present the finest possible contrast of colours—ground of the feathers bright orange, tipped with white, with an occasional sprinkling of green, black, and brown, with splendid white top-knot. The weight of the cock about 6 lbs., and the hen about 5 lbs.; height of the cock about 20 inches, and of the hen about 18 inches. They cannot be described as having a comb, being so diminutive as scarcely to be called one; wattles small, top-knot beautifully white, hackles spangled, as the rest of the plumage, tail well plumed, legs blue, flesh white and delicate, eggs abundant, chickens easily reared. Part of the lot I imported were purchased by John Augustus O'Neill, Esq., of William's-park, Rathmines, who highly appreciated them; he afterwards imported some duplicate birds, from the same locality from which I had mine—they both, precisely corresponded. The distinguish ing characters from the Spangled Hamburgh are, the white top-knot, and the absence of the ruff under the beak, which cannot be wanted in a well-bred Hamburgh fowl. Both cock and hen have a superior quiet elegance. I cannot say too much for their beauty.

THE SPANGLED HAMBURGH FOWL,

Another very beautiful variety of poultry, distinguishable from the preceding, by their large top-knot, being coloured instead of white, and their black and conspicuous ruff, on their throat and under their beak; they approach so nearly to the preceding that they are frequently confounded with each other, and even bred together, as the same, which has caused the Hamburgh so frequently to show the white feathers in their top-knot, and the Spangled Polish the dark colouring in theirs; but still the ruff, at the throat, distinguishes the fowl; the chickens, though of the same clutch, sometimes have the ruff at the throat, and some of



THE SPANGLED HAMBURGH COCK.

the same, may be without it, but, as before described of the Dorking and Sussex, the breeders designate them Spangled Polish, if without the ruff, but Spangled Hamburgh if they happen to possess it. Perfectly pure-bred birds, of either variety, are easily distinguished from the other, but most difficult to procure. The ground and colouring of the feathers differ as well as the ruff and top-knot. The first, and, perhaps, the best Spangled Hamburgh I ever imported, were shipped to me, at Rotterdam, and turned out

THE SPANGLED HAMBURGH HEN.

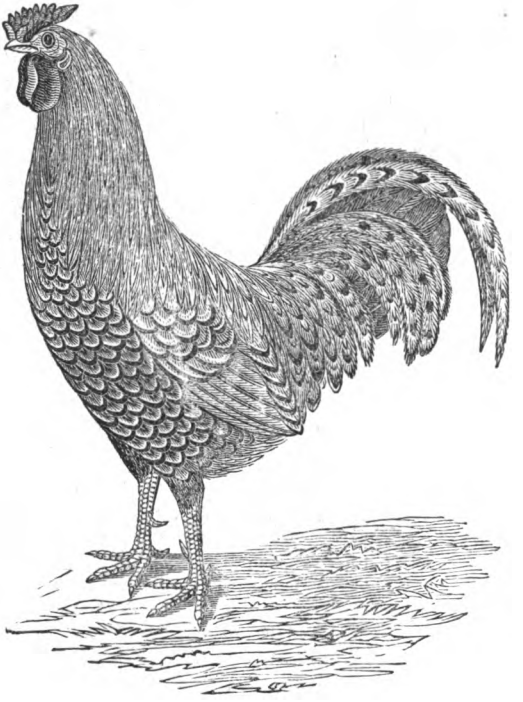
very superior birds. Part of the lot I disposed of to Arthur Haffield, Esq., of the Treasury, Dublin Castle, and another part to R. P. Williams, Esq., of Drumcondra Castle. Both these gentlemen have carefully preserved the breed, and I venture to say their experience, for years, has not found a better. So superior were they in carriage and plumage, that the latter gentleman has forwarded some specimens to the London Zoological Society's show, to compete, with all England. Their weight is as near as possible the Black and Spangled Polish, or, perhaps, a little more—say 6½ lbs. for the cock, and about 5½ lbs. for the hen; the cock stands about 21 inches, and the hen 19. If even pure-bred, this bird is subdivided into golden and silver spangled, the ground of the feathers of the golden spangled, being a rich

yellow, approaching to an orange red, with black spot or spangle: the silver spangled differs from the preceding, by the ground of the feathers being a silvery white; both are frequently obtainable in the same clutch. The comb, as in other highly-crested fowl, is diminutive; wattles small; hackles gold or silver spangled, according to plumage; tail beautifully plumed; legs blue or white; skin white; flesh white and juicy; eggs a moderate size, and abundant; chickens easily reared. I should wish, from their superior beauty, and usefulness as layers, they were more abundant. The slightest cross entirely deteriorates their value; they may be truly said to be both useful and ornamental; they are just such birds as a lady, of good taste, would wish to see about her lawn; and she would not be disappointed, if she wished for a fresh egg or omlet daily.

RED MOONED, OR GOLDEN SPANGLED PHEASANT FOWL.

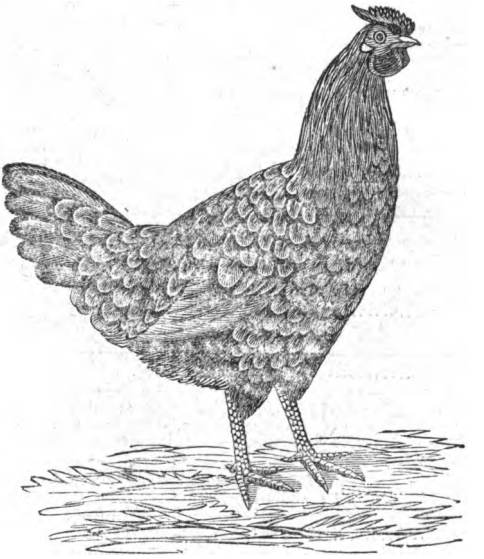
These birds, though bred carefully and distinctly as near us as Lancashire, Westmoreland, and Yorkshire, are but little known in Ireland: they take their name, not from any affinity to the true Pheasant, but from their beautiful markings, much resembling the brown Pheasant cock. They are prized by the poultry fanciers for their elegant deportment, as well as superior markings, and poultry clubs are established in the principal towns, through the northern and midland counties of England, for their promotion, the members of which are awarded premiums for breeding and rearing the best specimens, a standard being laid down by the club, as to the points of perfection and markings. Good specimens, even in the locality in which they are bred, from the encouragement given to them, bring high prices; indeed, so much are they valued, in consequence of the spirit of competition, that some breeders would not part with their stock for any reasonable sum. I have so frequently experienced the liberality of poultry-fanciers, and having had promises from the first keepers of them, I have always been able to procure fine specimens. I have been told by a gentleman, who long resided in Russia, that they are common in that country, and some specimens are said to have come here, from that quarter.

The male bird weighs about 5½ lbs., and the female about 4½ lbs.; height of the cock, 19 inches, and of the hen 17 inches; the ground of the feathers, a fine rich reddish yellow, tipped or spotted with metallic black; comb large, double-rosed, pointed at the back.



GOLDEN SPANGLED PHEASANT COCK.

free from top-knot; wattles large and rounded; ear-lobes white; hackles on neck and saddle spangled; tail finely plumed; legs blue; skin white; flesh delicate; eggs very abundant; no extraordinary care necessary for the chickens. These are the fowl that persons, without mind or understanding, will tell you are half Pheasant, or, perhaps, without caring, so as they effect a sale; but I can assure my readers, there is not a drop of Pheasant blood in a hundred brace of them. They are true and unmixed domestic poultry, an appellation which cannot be applied to the Pheasant, as they never have been domesticated. For the satisfaction of



GOLDEN SPANGLED PHEASANT HEN.

those who may not be familiar with the bird, I copy, from the articles of one of the clubs, the following list of the points of perfection, showing what is considered the best colour and markings:—

POINTS.	MARKS ON FEATHERS, ETC., CONSIDERED BEST.
1st, Comb.....	Best double, best square, the most erect, and best piked behind.
2nd, Ears	The largest and best white.
3rd, Neck.....	The best streaked with green black in the middle of the feathers, and best fringed with gold at the edges.
4th, Breast	The largest moons, brightest and best green black, most free from being tipped with white or red at the end of the moon, and the clearest and best red from the moon to the bottom colour.

POINTS.	MARKS ON FEATHERS, ETC., CONSIDERED BEST.
5th, Back	The largest moons, brightest and best green black, least tipped with white or red at the edges of the moon, and the best and clearest red from the moon to the bottom colour.
6th, Rump	The largest moons, brightest and best green black, least tipped with white or red at the eges of the moon, and the best and clearest red from the moon to the bottom colour.
7th, Wing, Divided into four parts:— 1st, Bow	Best and brightest green black, and best and clearest red.
2nd, Bars	To have two distinct bars, composed of the largest, clearest, brightest, and best green black moons, and the clearest and best red from the moon to the bottom colour.
3rd, Flight	The clearest and best red.
4th, The lacing, or top of the wing, above the flight	Largest, clearest, brightest, and best green black spots on the end of the feather, and the best and clearest red from the spot to bottom colour.
8th, Tail	The brightest, darkest, and best green black. To be full feathered.
9th Legs	Best and clearest blue.
10th, General appearance	The best feathered hen.

SILVER PHEASANTS *as they are denominated by the clubs*, OR SILVER SPANGLED PHEASANT FOWL,

Are but a variety of the same bird, with the ground of the feather a silvery white, instead of being a rich orange red. The rest of the marking, described in the club rules, are so similar to those given above, that I shall not take up time or space with copying them from the rules, but refer to the tabular form of the points and markings of the Red Mooned Pheasants. I exhibited some fine specimens of both the preceding at the Kilkenny show, which have become the property of A. Whyte Baker, Esq., of Ballytobin House, Callan. I am not aware of any perfect specimens here, but those in his possession. I have been favoured for the first time, with some fine specimens of what the clubs call

BLACK PHEASANTS,

Which have not the least approach to the bird after which they

are named, in station or plumage, the whole bird being a rich, glossy, green black; in other particulars their standing and appearance are precisely the same as the two preceding; there is no doubt of their having been bred from them. As the club rule may describe them better than anything I can say, I shall take leave to present it to my readers:—

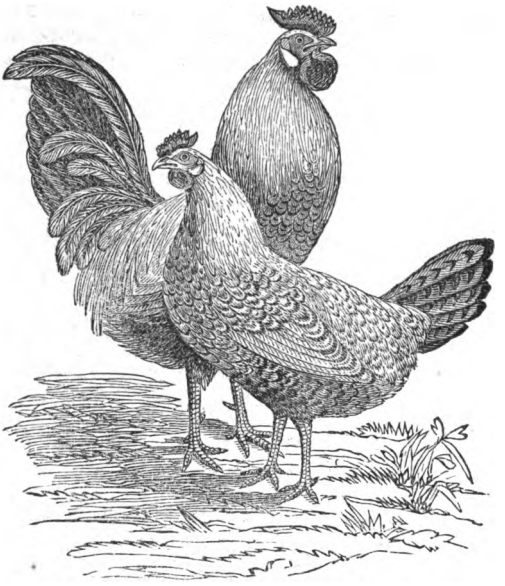
POINTS.	MARKS ON FEATHERS, ETC., CONSIDERED BEST.
1st, Comb.....	Best double, best square, most erect, and best piked behind.
2nd, Ears.....	Largest and best white.
3rd, Colour	The best and richest glossed green black.
4th, Legs	Best and clearest blue.
5th, General appearance	Best feathered hen.

THE BARBARY FOWL,

Is a large, *grotesque* fowl, with feathered legs, like our booted Bantam. I have received some specimens across the Mediterranean, through Spain, where they are frequently found. They are productive and large-bodied, and have been imposed on some collectors as Cochin China, without having the most distant claim to the title. They are generally of a dark colour, and are rejected as mothers, as well as all the booted fowl, being likely to addle their eggs, or injure their young by the damp of their boots, while hatching or rearing.

THE NEGRO FOWL,

Is rather a small variety, and neither ornamental nor useful; it should not be permitted into any poultry-yard; it has black feathers, black comb and wattles, black skin, and black bones; it is a well-shaped little bird, but, from its black comb and gills, has an unhealthy appearance; there is nothing to recommend it, but curiosity. It is a native of Africa.



BOLTON GRAYS, BOLTON BAYS, DUTCH EVERY-DAY LAYERS, PENCILLED DUTCH FOWL, *provincial* CHITTIPRATS, CREELS, ETC.

They are a very handsome little fowl, frequently imported from Holland, but seem to have made a stand in Bolton, in Lancashire, from whence they are named, and where they are a strong feature amongst the prize poultry, shown for feather. The ground colour of the Bolton Grays is pure white, beautifully and minutely touched with black, originating the appellation of pencilled fowl. Bolton Bays are precisely the same fowl, but not so abundant—the only difference being, the ground of the feather is a Rufus yellow, the markings or pencilling is precisely the same as in the grays. There is not the slightest distinction between the two, in any other respect. They are known by provincial names, in various parts of the country. In the neighbourhood of London, from the frequency of their being brought over by the Rotterdam steamers, they are

denominated "Dutch Pencilled Fowl," or "Dutch Every-day Layers." They are an entirely distinct fowl, both in feathering, size, shape, and markings, and cannot be confounded with any other. The nearest approach to them, is the Silver Pheasant fowl; their markings are, however, decidedly different. They are more generally known, and longer established in England than the Pheasant Fowl, and have been called by various names, in the different localities through which they are dispersed: they are a neat, plump-bodied fowl, healthy and hardy, very nice on the table as a substitute for young chickens; their flesh white and juicy; their body plump and round. The cock weighs about 4¾ lbs., and stands 17 inches high; the hen 4 lbs., and stands 15½ inches high; the plumage described above; the comb double-rosed, with sharp top, free from top-knot; ear-lobes white; wattles large and round; hackles pencil-touched or white; tail inclined to be dark; legs blue or white; eggs most abundant but small; chickens handsome, and easily reared. They are beautiful ladies' pets; require but little care; are truly ornamental on a lawn or grass plot; and if the lady be a lover of a fresh egg, she will not be disappointed by the "Dutch Every-day Layers."

THE FRIZZLED FOWL, *corrupt* FRIESLAND,

So libelled, and misrepresented, by persons into whose possession they never came, or, perhaps, who have never seen them, are precisely the opposite to what they are described. They are healthy, hardy, and abundant layers, good sitters, and no better mothers, and the chickens easily reared, and though, to appearance, they are exposed to the inclemency of the weather, they are not so, having an abundant downy covering under their feathers, and well calculated for bringing up their own, or any other stock. I can with confidence recommend them as mothers, for game fowl, (I mean Pheasants, Capercalzie, Black-cock, Ptarmigan, Grouse, or Partridge,) and are just as easily kept as the commonest cottage breed; they are of all colours; of the ordinary size of our domestic fowl; are said to be of eastern origin. The cock weighs about 5 lbs., and stands about 18 inches high; the hen about 4½ lbs., and stands about 16 inches high. The plumage has a truly singular appearance, each feather being curled up, and projecting from the bird; the comb rather large, serrated and erect; free from top-knot; ears and cheeks of ordinary appearance; wattles large and rounded; hackles to correspond with their colour; tail plumed as in other fowl; legs of the various colours of the bird;

skin white; flesh good; eggs abundant; successful rearers of chickens. I would recommend them as mothers.

The next I shall endeavour to describe is

THE RUMPKIN, OR TAIL-LESS FOWL,

Which is about the usual size of our common poultry, but whether an original and distinct species, or an accidental variety, is not handed down to us from any of the early writers. So long as I have been an observer of poultry, I have occasionally met a few of them, and for years have scarcely been without some specimens. They are not very scarce, nor abundant—nearly on the same par with the Frizzled Fowl; and although objected to by some, I should be sorry to hear of their becoming extinct, lest, as with the White Polish, with black top-knot, their existence become doubtful. They do not make an unpleasant appearance—precisely the same as the Partridge, Grouse, or Ptarmigan, being destitute of what the ladies call the Pope's nose. They are said to be from Ceylon; others give them a different locality. All the specimens passing through my hands were bred here. The cock weighs 6 lbs., and stands 19 inches high; the hen 5 lbs., and stands 17 inches high. The plumage varies in colour; the comb large, serrated, and erect, free from top-knot; large wattles; ear-lobes white, well furnished with hackles, on neck and saddle; perfectly tail-less; legs white; skin white; flesh white and juicy; eggs abundant; chickens easily reared. Those in my possession are good specimens of poultry, as to size, plumage, or markings. I consider them rather a superior description of fowl, and the hen-wives who mutilate their stock, both cocks and hens, by depriving them of their tail, cannot object to the rumpkins, as they are perfectly unencumbered by that appendage.

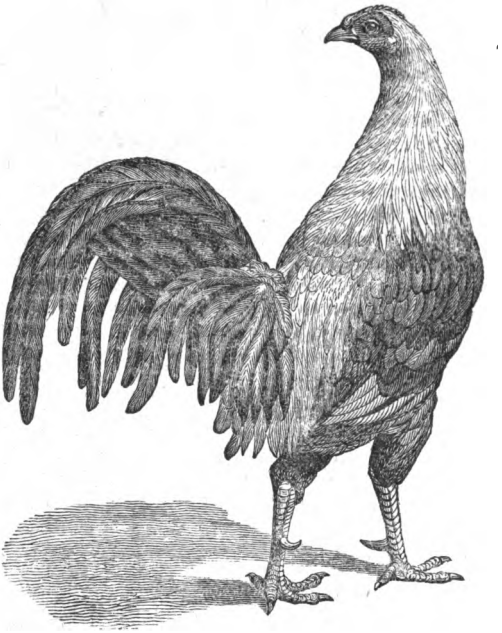
THE SILK FOWL,

Of which there is a large and small variety—the large of many colours, the small usually white. I have had the small, white, for many years, which were imported from Sumatra, and have most successfully hatched out, by them, gold, silver, white, pied, and brown Pheasants, for which nothing can be better adapted, than their fine downy, silken, or woolly coat, and they are most careful nursers; for this they are invaluable. Though the plumage is white, the skin is black. Their flesh is coarse and bad, and of unpleasant flavour. Their bones, though ever so over-dressed,

always pink, so that they have the appearance of being under-done. They are not desirable in a poultry-yard, as they would spoil the finest table fowl, if crossed on them. I can, therefore, only recommend them as mothers, than which, no fowl is better adapted. The cock of the small variety weighs about 2½ lbs., and stands about 13 inches high; and the hen 2 lbs., and stands 11 inches high. The plumage of the best-bred specimens is white. I have seen some of inferior breeding, of other colours; comb serrated and erect, lark crested; ear-lobes white, with a tinge of green; wattles round and short; hackles silky, with a silvery hue; tail not well plumed; legs yellow, and partially booted; flesh inferior; eggs abundant; chickens easily reared: no better mothers. As I conceive the large variety to be a mere cross produced from the small, I shall not describe them.

THE GAME FOWL.

This well-known and highly-esteemed fowl, is found to be a distinct variety, truly remarkable in its eagerness for combat, and the unflinching courage with which it maintains the fight, under circumstances incredible, and utterly inconceivable to those who have never witnessed the exhibitions which formerly disgraced our city, and, I may say, every other part of this Christian country. I can assure my readers, the enthusiasm with which this mis-called sport of cock-fighting, was once followed, by its promoters, was never exceeded by any nation. It is evidently of Grecian origin, the inhabitants of Delos and Tanagra, were lovers of this sport, at a very early period, when several cities of Greece, were celebrated for their magnanimous breed of chickens. It was adopted by the Romans, about 471 years before the Christian era, or, according to some authors, immediately after the Peloponnesian war. They had likewise a breed of hens, at Alexandria, in Egypt, which produced the best fighting cocks; but though it is certain that these fowls, at first, fought full feathered, it was not long before feeders were made use of, as in the modern mode. But at Athens, *cock-fighting* was partly a *political* and partly a *religious* institution, and was there continued, for the purpose of improving the valour of their youth, and by degrees became a common pastime, as well as in all other parts of Greece. On the other hand, the Romans paired Quails, as well as cocks; and according to Herodian, the first quarrel between Bassianus and eta, arose about the fighting of their quails and cocks: notwith-



THE GAME COCK.

standing this, the Romans did not match the latter till the commencement of the decline of the empire.

It is not particularly known when the pitched battle was first introduced into England. We have no notice of cock-fighting earlier than the reign of Henry II. William Fitz-Stephen describes it then, as the sport of school-boys, on Shrove Tuesday; the theatre was the school, and the schoolmaster, it seems, was the controller and director of the sport. The practice was prohibited in the 39th of Edward III., but became general under Henry VIII., who was personally attached to it, and established the cock-pit at Whitehall, to bring it more into credit. James the First was so remarkably fond of it, that, according to Monsier de la Bodenie, who was ambassador for Henry IV. to the King, he constantly amused himself with it twice a week. Under

Elizabeth, it was not less in vogue, and the learned Roger Ascham, then favoured the world with a treatise on the subject. There was then a pit in Drury-lane, Horseferry-road, and Gray's-Inn-lane, St. James's Park, and another in Jewin-street; but the practice was a second time prohibited, by an act under the Protectorship, in 1554. Our Dublin pits are of a more recent date, the principal of which were in Clarendon-street and Essex-street, where the Meaths and Kildares often proved the powers of their cocks. The fights were managed by men, who made a livelihood by it, and were called handlers: they alone were admissible within the "magic circle."

A cock-pit, like a race-course, in a sporting point of view, was for every person, and selection of company was entirely out of the question. The noble lord, and the *needy* commoner, were both at home, after they had paid their *tip*, for admission; and persons who enter the pit to sport a *crown*, bet a *sovereign*, or to put down their pounds, are too much interested upon the *main*, to consider who they may choose to "*rub* against" for the time being.

Cocking was kept up with great spirit at Newcastle. At one of their last meetings, the cockers at the above place, in point of extent, exceeded everything of the kind known in Great Britain. Upwards of 200 cocks were fought, and the fighting generally good, particularly the cocks of Baglin-hill and Lockey, which all won great majorities. A remarkable circumstance occurred on the Saturday before fighting. A match was made for 20 sovereigns, between Parker and Reed, feeders, and won by the latter after a hard contest. Parker's cock, however, came round so soon after, that his party made a second match, to come off, on the following Monday, for a like sum, which was again won by Reed, after a severe battle—a circumstance, perhaps, altogether unknown in the annals of cocking. It is also calculated that, at the termination of the races, which finished with cocking, upwards of 1,000 cocks had met their deaths. Newcastle, therefore, challenged the world for cocking. Cheltenham, Chester, Gloucester, Norwich, Lancaster, Preston, Stamford, &c., &c., were celebrated for their cocks. The patrons were the Earl of Derby, Sir William Wynne, Ralph Benson, Esq., &c., &c.

The exterior qualifications of a cock are, head thin and long, or, if not, very taper; a large, full eye; beak crooked and stout; neck thick and long (a cock with a long neck has a great advantage in his battle, particularly if his antagonist is one of thoes cocks that will fight at no other place but the head); his body

short and compact, with a round breast (as a sharp-breasted cock carries a great deal of useless weight about him, and never has a fine forehand); his thighs fine and thick, and placed well up to the shoulder (for where a cock's legs hang dangling behind him, be assured he never can maintain a long battle); his legs long and thick, and if they correspond with the colour of his beak—blue, gray, or yellow—I think it a perfection; his feet should be broad and thin, with very long claws. With regard to his carriage, he should be upright, but not stiffly so; his walk should be stately, with his wings in some measure extended, and not plod along, as I have seen some cocks do, with their wings upon their backs, like geese; his colour rather gray, yellow, or rose, with black breast; his spurs rough, long, and looking inward. As to the colour he is of, it is immaterial; there are good cocks of all colours; but he should be thin of feathers, short, and very hard, which is another proof of his being healthy. Remember that a cock, with all his stoutness, length, and thickness of leg, rotundity of breast, "fine forehand," firmness of neck, and extent of wing, ought not to weigh more than 4 lb. 8 or 10 oz.; if he happen to have an ounce or two more in his composition, he is out of the pale of the pit, and is excluded by all match-makers, from "fighting within the articles." A bird, to be a bird, "fit for the white bag, the trimmed wing, the mat, and the silver spur," must be light upon the leg, light fleshed, and large boned, but still no more than 4 lb. 8 or 10 oz.

A cock-pit was a large, lofty, circular building, with seats rising, as in an amphitheatre; in the middle of it was a round, matted stage, of about 18 or 20 feet in diameter, and rimmed with an edge, eight or ten inches in height, to keep the cocks from falling over in their combats; there was a chalk ring in the centre of the matted stage, of, perhaps, a yard diameter; and another chalk mark within it, much smaller, which was intended for the setting to, when the shattered birds were so enfeebled as to have no power of making hostile advances towards each other. This inner mark, admitted of their being placed beak to beak. A large and rude branched candlestick was suspended low down, immediately over the mat, which was used at the night-battles. The birds were weighed and matched, and then marked and numbered; the descriptions were carefully set down, in order that the cock should not be changed; the lightest cocks fought first in order. The key of the pens, in which the cocks were set and numbered, was left on the weighing-table; or the opposite party might, if he pleased, put a lock on the door. The

utmost possible care, in short, was taken, that the matched birds should fight, and no substitutes intruded. *The following sketch of a set-to, is from the pen of a celebrated amateur:—*

The only persons allowed on the platform are the setters-to. The first I shall name Nash, the younger; he was followed by a stout, plump, old, ostler-looking man, named Nash, the elder. This person carried a white bag, containing one of the brave birds for the battle. The two men stepped upon the mat; the hubbub is instantaneous—"Two to one on Nash"—"A guinea on Nash" —"Nash a crown;" the bets are laid on the setter-to. From the opposite side of the pit, a similar procession entered; the setter-to, Fleming, by name, did not appear so great a favourite as young Nash. The chuckle of the cock in his bag was answered deeply and savagely from the other, and the straw seemed spurned in the narrow cell.

Nash's bag was carefully untied, and Nash himself took out one of the handsomest birds I think I ever beheld; he was a red and black bird; slim, masculine, trimmed, yet with feathers glossy, as though the sun shone only on his nervous wings; his neck arose out of the bag, snake-like—terrible—as if it would stretch upwards to the ceiling; his body followed—compact, strong, and beautiful; and his long, dark blue, sinewy legs came forth—clean, handsome, shapely, determined, iron-like! The silver spur was on each heel, of an inch and a half in length, tied on in the most delicate and neat manner; his large, vigorous beak showed aquiline, eagle-like; and his black, dilating eyes took in all around him, and shone so intensely brilliant, that they looked like jewels; their light was that of thoughtful, sedate, and savage courage; his comb was cut close; his neck trimmed; his wings clipped, pointed, and strong; the feathers on his back were of the very glossiest red, and appeared to be the only ones which were left untouched; the tail was docked triangle-ways, like a hunter's. The gallant bird clucked defiance, and looked as if he "had in him something dangerous!" Nash gave him to Fleming, who held him up above his head, examined his beak, his wings, his legs, while a person read to him the description of the bird from paper; and upon finding all correct, he delivered the rich, feathered warrior back to Nash, and proceeded to produce his own bird for a similar examination.

But I must speak of the senior Nash—the old man, the feeder. When again may I have an opportunity of describing him? and what ought a paper upon cocking be accounted worth, if it fail to contain some sketch, however slight, of old Nash? He wore a

smock-frock, and was clumsily, though potently built, his shoulders being ample, and of a rotundity resembling a wool-pack; his legs were not equal to his bulk; he was unconversational, almost to a fault, and never made even the slightest remark that did not appertain to cocks or cocking; his narrow, damp, colourless eye, twinkled a cold satisfaction when a bird of promise made good work on the mat, and sometimes, though seldom, he was elevated into the proffer of a moderate bet; but generally he leaned over the rails of a small gallery, running parallel with the coop, and stooping attentively towards the pit, watching the progress of the battle. I remarked he was extremely like a cock—old Nash's beaked nose, drawn close down, over his mouth; his red forehead and gills; his round body; and blue, thin legs; and his silver-gray, scanty feathery hair, lying like a plume over his head, all proved him cock-like. This man, thought I, has been cooped up in pens, or penned up in coops, until he has become shaped, coloured, mannered like the bird he has been feeding. I should scarcely have been surprised, if told, that old Nash crowed when the light first dawned of a summer's morning. I warrant he pecked bread and milk to some tune, and, perhaps, slept upon a perch! But Fleming lifted his bird from the bag, and my whole mind was directed his way: this was a yellow-bodied, black-winged, handsome cock, seemingly rather slight, but elastic and muscular; he was restless at the sight of his antagonist, but quite silent; and old Nash examined him most carefully, by the paper, and delivered him up to Fleming, upon finding him answer to his description. The setters-to then smoothed their birds, and handled them, wetted their fingers, and moistened their bandaged ankles, where the spurs were fastened; held them up opposite to each other, and then pampered their courage and prepared them for combat.

THE FIGHT.

The mat was cleared of all persons except Fleming and young Nash; the betting went on vociferously; the setters-to taunted the birds with each other's presence—allowed them to strike at each other at a distance—put them on the mat facing each other—encouraged and fed their crowing and mantling, until they were nearly dangerous to hold, and then loosened them against each other, for the fatal fight.

The first terrific dart into attitude was, indeed, strikingly grand and beautiful; and the wary sparring, watching, dodging for the first cut, was extremely curious. They were beak point

to beak point, until they dashed up into one tremendous flirt, mingling their powerful, rustling wings, and nervous heels, in one furious, confused mass. The leap, the fire, the passion of strength, the *certaminis gaudia*, were fierce and loud: the parting was another kind of thing, every way. I can compare the sound of the first flight to nothing less than that of a wet umbrella forced suddenly open. The separation was death-like: the yellow, or rather the ginger bird, staggered out of the close, drooping, dismantled, bleeding: he was struck.

Fleming and Nash severally took their birds, examined them for a moment, and then set them again opposite to each other. The handling of the cocks was as delicate as if they had been made of foam, froth, or any other most perishable matter. Fleming's bird staggered towards his opponent, but he was hit dreadfully, and ran like a drunken man—tottering on his breast, sinking back on his tail—while Nash's, full of fire and irritated courage, gave the finishing stroke, that clove every particle of life in twain. The brave bird thus killed, dropped at once from the "gallant bearing, and proud mien," to the relaxed, draggled, motionless object that lay in bleeding ruin on the mat. I sighed and looked thoughtful, when the tumult of the betters startled me into a consciousness of the scene at which I was present.

The victor cock was carried by me in all his pride, slightly scarred, but evidently made doubly fierce and muscular, by the short encounter he had been engaged in. He seemed to have grown double the size: his eyes were larger.

The paying backward and forward of money, won and lost, occupied the time until the two Nashes again descended with another cock.

Sometimes the first blow was fatal, at another time the contest was long and doubtful, and the cocks showed all the obstinate courage, weariness, distress, and breathlessness which marks the struggle of experienced pugilists. I saw the beak open, the tongue palpitate, the wing drag on the mat: I noticed the legs tremble, and the body topple over upon the breast; the eye grow dim, and even a perspiration break out upon the feathers of the back. When the battle lasted long, and the cocks lay helpless near or upon each other, one of the feeders counted ten and the birds were separated and set-to at the chalk. If the beaten bird does not fight while forty is counted, and the other pecks or shows signs of battle, the former is declared conquered.

The cocks were the next object of curiosity. A covering was hung before each pen, so that I heard rather than saw the cocks;

but it was feeding time, and I beheld innumerable rocky beaks, and sparkling eyes at work in the troughs; and the stroke of the beak, in taking up the barley, was like the knock of a manly knuckle on the table. Old Nash was mixing bread and milk for his feathered family.

The flesh of the game fowl is white, tender, and delicate; the eggs rather small, mostly inclining to a light buff. Cockers have numerous names for the different colours—such as piles, black-breasted reds, silver-breasted ducks, birchin ducks, dark grays, mealy grays, blacks, spangles, furnaces, polecats, cuckoos, gingers, duns, red duns, smoky duns, among all of which good birds may be found; but the following eight are superior to any parti-coloured birds—namely, dark reds, dark black-breasted reds, dark black-breasted birchin ducks, dark black-breasted berry birchins, silver black-breasted duck-wing grays, clear mealy grays, dark black-breasted grays, and red duns.

The general appearance of the hen is quite in character with that of the cock. In one respect she is a more important personage, as it is an axiom among cock-masters that the produce of an ill-bred hen is worthless no matter how superior the cock may be, but that an indifferent cock and superior hen may produce good birds. It is not indispensable that the eggs should be buff-coloured: that generally-received idea, is a popular error.

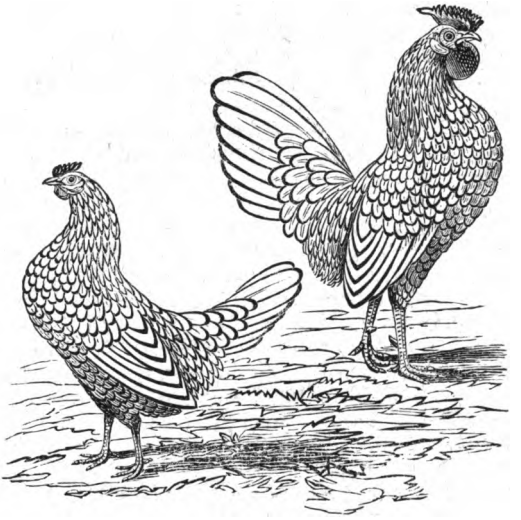
To enter into the minutiæ of the course preparatory to fighting, would exceed my limits, and add but little to the "industrial resources" of the cottager. Suffice it to say, the cock is confined for a month, in a small, wooden pen, with but little light; fed at various periods of his incarceration, with different descriptions of food, adapted to bring about the condition of wind and limb required, and stimulate his natural propensity; allowed but little water; taken out occasionally and put to spar with some of his compeers—their spurs rendered harmless, by leather mufflers, much after the fashion of the "fives court." During the period of preparation, the mane and vent feathers are cut off, the tail and wing feathers are made very short, and the spurs truncated, for the convenience of fastening on sharp, artificial gaffs of steel or silver, about an inch and a half in length, with which the battle is sometimes finished, at the first rise or flight.

Some persons cut off the comb and wattles at a very early age; others pursue a contrary course, and defer the operation until a full development takes place. I have heard of its being done in the cock-pit previous to setting to. There are also several fanciful cuts amongst the cockers, all of which have their advocates.

Cocking had its royal patronage and promotion so late as George the Fourth's time; and although now prohibited in London, Dublin, and Edinburgh, I have it from good authority, that in the remote parts of England, Ireland, and Scotland, this practice still exists amongst the lower orders.

I have been favoured with some fine specimens from the great aviary, at Knowsley, and shall treat the connoisseurs with a sight of the black-breasted red, at our annual exhibition.

I feel there is some apology due to my readers for the length of this article, and for my digression from the "*utile et dulce*" course marked out in my introduction. By its total omission, my chain would be deficient a remarkable link; and having taken the subject in hand, I found it impossible to be more concise.



THE BANTAM.

"Proud of his plumage and his spurs,
The feathered coxcomb struts, gallant and blithe,
As any beardless cornet of dragoons."

The Sebright Bantam, or Sebright Jungle Fowl, takes precedence of the whole puny tribe, for beauty of plumage, strut, demeanour,

and pugnacity. They are splendidly marked, as my readers will perceive, from the annexed sketch, the ground of the feathers being either a rich, orange brown, or cream colour, and each feather, pencilled round with black, or dark brown, with the greatest uniformity. They are said to have been brought, by the late Sir John Sebright, M.P. for Herts, from India, and have frequently been exhibited in London; for beauty of plumage, and, indeed, if well bred, and perfect in their markings, nothing can exceed them. The regulations of the Society of London Amateurs, require that each exhibitor shall offer his birds for sale, after the exhibition, and may bid himself, and put on a prohibitory amount of purchase-money. It is on record, that Sir John, bid up one of his diminutive hens to £29, and bought her in, at that price. And it is recorded in the *Illustrated London News*, of 20th February, 1847, that so late as that date, two hens and a cock, of these beautiful emblems, of pride and consequence, sold for £50 and 1s., being a shilling more than the amount put on them, by their owner. At the sale of the late lamented baronet, the golden grounded birds averaged £6 a brace, and the silver spangled £8 a brace; although they are becoming comparatively abundant, they still keep up a high price, in the London market, if well marked. There has been lately offered here, some fine specimens, from Sir John's own stock, at a very low figure. I do not think anything could exceed their perfection of feather. A lady near Shrewsbury has procured some fine specimens, of both gold and silver spangled, from this neighbourhood; if she still retain them, I think she may challenge England; as far as I can judge, they are quite superior to those that took the prize in London. Some ladies in the Queen's County, have procured fine specimens from the late baronet's stock; I have no doubt, but under their fostering care, the breed will be kept up with as much ardour as during the life-time of the great poultry patron, Sir John, and that we will be breeding them, as in the baronet's lifetime, "to a single feather," and retain their character of the "prettiest of domestic birds." The male birds should stand about 12 inches high; the standard weight being 22 oz.; the plumage as above described, the rose comb is preferred; the wattles are moderately long; face and throat bare; no top-knot or ruff on neck; as free as possible from hackle; tail without the plume, or what is called hen-tailed; perfectly clean-legged. The hens are abundant layers, and though it is said there is a difficulty in rearing their chickens, my patrons have been successful in that way. Both flesh and eggs are said to be of fine flavour; although scarcely ever without the birds, I

have not had the good fortune to taste their flesh, but have no hesitation, from the report of others, in pronouncing it delicate. The Bantams take their name from a country on the N.W. coast of Java, once populous and flourishing, but now miserably deserted, its commerce being transferred to Batavia.

There are several varieties of the Bantam, in addition to the above—the black-breasted red, black, Nankin, white, and booted. The black-breasted red, if denuded of his comb and gills, is a complete miniature representative of our game cock. I had a beauty of this sort, that used to put dogs and fowl to the route, and had the temerity to quarrel with a Peregrine Falcon for his food, but unfortunately suffered decapitation for his presumption. This is the nearest approach to the Bankiva Cock, or wild cock of Java, and so like, in some individuals, as to be difficult to distinguish them. The black variety has all the pugnacity of its congeners. The whole of the clean-legged tribe are recommended as good mothers; I have reared all our usual sorts of Pheasants, most successfully, by them. The Nankins are those in use at the great aviary of the Earl of Derby, for hatching out the various sorts of Quail, Partridge, and Pheasants, to which Mr. Thompson has added Cantelo's Incubator, and no one, in Britain, can boast of so much success or experience, as that experienced ornithologist. The white are precisely the same as the others, only varying in colour. James Walter, of Windsor, gives a rather unflattering account of their destroying their eggs; I have kept them, and never discovered it.

The Booted, or Feather-legged Bantam, should not escape our notice. They are of all colours; those with the greatest quantity of feathers on the legs, are usually spotted, red, black, and white. I have seen them with feathers three inches long on their legs, so as to impede their walking. They are becoming scarce, and even promise, if not rescued, to become extinct; the objection, of the fanciers, is, that their boots getting damp, is apt to addle the eggs, put under them for incubation. They, however, have their advantages, as they seldom do an injury, by scratching, and are frequently kept as ornamental pets about a garden.

THE BANKIVA FOWL, OR WILD COCK OF JAVA,

And the Black-breasted-red Bantam, are so very like each other that the Bankiva comes next in order; indeed, there is no doubt of this species being the progenitor of the Bantam, or, perhaps, of most of our domestic fowl. The eyes and throat of this variety

are bare; the comb large, of irregular shape; two wattles hang from the lower mandible; the iris of the eye yellow; the head, back, and sides of the neck, surrounding the bare skin upon the throat and the rump, are covered with long, rounded feathers, of a clear and brilliant, golden orange. Below the hackles, the upper part of the back is bluish-black, and the centre, with the lesser wing-coverts, are of a rich, deep chestnut; the webs of the feathers quite disunited. The greater coverts are steel-blue, the secondaries of the same colour, with a broad margin of chestnut; the quills brownish black, edged with pale, reddish yellow. The hen is of a dusky, ash gray, and resembles our common poultry more than any other wild variety; they inhabit the forests and borders of woods, and are exceedingly wild; they are rather larger than our small Bantams, but not so large as our ordinary barn-door fowl: the tail is not so much elevated as in the tame birds; the legs and feet are gray and furnished with strong spurs.

I have been kindly favoured, by a view of a fine specimen of this bird, shot by Captain Williams, of Ely-place, Dublin, at the Dera Doon jungle, under the Tavollic range, of the Himalayan mountains, which he has got, put up by Mr. Glennon, of Suffolk-street, beautifully grouped, with a collection of the gorgeous plumed, Himalayan birds.

Another of the wild jungle fowl is

THE BRONZE COCK,

Sent from the interior of Sumatra, by M. Diard. It is rather larger than the Bankiva Cock; the comb is very large, with a plain edge; the cheeks and throat are bare, and from the base of each lower mandible there is a short, thick wattle; the whole of these parts are bright red. The feathers of the head, neck, and upper part of the back are slightly lengthened, but do not take the usual long, hackle shape, and are of a metallic green, with brilliant reflections. The plumes are of a deep, and rich purple, and are edged with a broad border of pale lake. The tail is also purple, with bright, metallic green reflections; the throat, breast, and the whole upper parts are of a deep black, shaded with purple, and, in some lights, with a greenish tinge.

THE FORK-TAILED COCK,

Which is nearly two feet in length, to the extremity of the tail; the cheeks are bare; the head furnished with a plain, entire comb,

and the throat with a single, large wattle, springing from the centre; they are all bright red. Instead of the long hackles, as on the neck of the domestic fowl, the plumage on their neck is remarkable for being short and rounded. The centre of these feathers is of a deep, metallic blue, which shades towards the edge to a golden green, and at the extremities they are furnished with a narrow band of very deep black. The feathers of the lower part of the back and tail coverts, are lengthened in the usual hackle shape; are of a deep black in the centre, and are bordered with a narrow stripe of pale yellow; those forming the wing coverts are of the same form, but the pale, narrow border is of a rich orange red: the whole under parts are deep black. The tail, as in all the wild varieties, is more in a line with the body, and has a slightly forked form; the large plume feathers are of a rich, metallic green, tinged with steel-blue; the bill, legs, and feet are yellow. The hen, as in all the poultry, is much plainer than the cock: brownish, with golden and greenish reflections. They are abundant in Java, and are often seen on the edges of the woods and jungles, but are very easily alarmed, and run to cover, and frequently mix with, and cross the tame birds, but are themselves never domesticated.

The last of the wild jungle fowl I shall name, is

SONNERAT'S WILD COCK,

Some fine living specimens, of which have been, for some years, in the collection of the London Zoological Society, and have successfully crossed with our domestic birds. It is a native of the continent of India, inhabiting the higher wooded districts, particularly Hindostan; it is not so large as our domestic fowl, but nearly so; the comb is large, with serrated edge, and double wattles, from the under mandible; the long, hackled feathers have a very singular appearance; they have a dark, grayish ground, the shafts of a bright, golden orange, and in the centre, and at the tip, dilate into a flat, horny plate, similar to what is seen in the wings and tail of the Bohemian Wax-wing; their appearance is both singular and beautiful. The centre of the back, the throat, breast, belly, and thighs, are of a deep and rich gray, having the shafts and edges of a paler tint; the tail is of a rich and deep green; the feathers which immediately succeed the long hackles, of a rich purple, edged with pale yellow; and those immediately succeeding, of a golden green, edged with gray; the whole with very

brilliant metallic reflections; the bill, legs, and feet, yellow. The hen is plain in her plumage, and perfectly free from the horny appendage; her colour brown, or brownish white; the legs and feet are bluish gray.

Those in the London Zoological Gardens, seem as familiar as any domestic fowl; it is said to be the boldest and strongest of all the known varieties, according to its size, and anxiously sought after by the cock-fighters, seldom failing to secure the victory over the largest game cocks.

What is usually denominated barn-door fowl, being a heterogeneous breed, from all the preceding, a description would be useless.

CHAPTER III.

CHOICE OF STOCK FOR BREEDING.

A SUMMARY of the different sorts of poultry may save the reader some trouble.

The *Cochin China* are large birds, and very prolific.

The *Malay* is perhaps larger than the Cochin China, and admirably adapted for crossing the smaller breeds.

The *Chittagong* is a large-bodied bird, and a good layer; the flesh is white and juicy.

The *Dorking* is a native bird, of course climatized; and is fit for table at a very early age.

The *Old Sussex* is precisely the Dorking, wanting the additional toe.

The *White Dorking* is small and handsome.

The *Spanish* lay the best egg, and are fine table fowl; their skin and flesh are white and delicate.

The *Columbian* lay an immense egg, and are well calculated for the table.

The *Hamburgh*, *Black Polish*, *Spangled Polish*, and *Pheasant Fowl*, if well fed, are everlasting layers, and beautifully ornamental.

The *Bolton Greys* are abundant layers, but their eggs are small. There are many other fowl described, which are kept more for

ornament or curiosity than use, at same time, I cannot, in justice to the *Frizzled Fowl* and *Rumpkins*, pass them over without declaring them to be excellent layers.

The *Sebright Jungle Fowl* are, perhaps, the most beautiful of the tribe, and have brought more money at the public sales, than any other known variety.

After selecting your breeding stock, for which the above may afford you some assistance, you are to recollect not to put more than five hens to one cock, all of which should be in perfect health, and if two years old the cock will be in his prime. I need not tell you to keep all other fowl apart, if you wish to have true-bred birds. Some persons like to cross, and say the Cochin China and Dorking make a fine cross; others prefer the Malay and Spanish. The Chittagong and the Old Sussex I know to be very good. If crosses are permitted, any of the large-bodied birds, crossed on each other, are desirable; and, perhaps, each of these crosses is superior to in-and-in bred birds, of any sort; but I am an advocate for true-bred birds, with an occasional introduction of fresh blood, of their own species, without which they are sure to degenerate.

Fancy poultry, if crossed, become reduced to common barn-door fowl, so that, as fancy fowl, they are worthless.

IN COLLECTING EGGS, FOR HATCHING,

You should prefer those newest laid, and while gathering, to be kept dry, clean, and free from damp or foul air; and if imbedded in dry bran, you will find the advantage. You will have to recollect the necessity of impregnation by the cock; and prefer the moderate-sized eggs—the over-large or over-small, not being advantageous for hatching—the soft-shelled or ill-shaped egg to be rejected. It is absurd to suppose that the gender of an egg can be ascertained from its appearance. The hen usually commences laying in the spring, and again in the summer; but if kept warm and well-fed, you may have eggs at any season. The approach of laying is indicated by the comb and wattles of the hen becoming a bright scarlet. The eggs should be taken from the nest every afternoon, when no more may be expected to be laid; for if left in the nest, the heat of the hens, when laying next day, will tend to corrupt them. Some hens are much more productive than others; I have had some of the Cochin China to lay two eggs a day, not constantly, but occasionally, with

one egg on the intermediate days. But the grand secret of procuring an abundance of eggs, is comfortable housing and abundance of food. Early pullets will lay all the winter, if well housed and fed. The laying continues more or less during the summer, until the moulting commences. The older the hen, the later she moults, and, consequently, commences to lay later in the season, perhaps not till April. The air-bag is placed at the larger end, between the shell and its lining membranes; it is about the size of the eye of a small bird, in new-laid eggs, but is increased as much as ten times in the process of hatching, or when the egg begins to get stale. The air-bag is of such importance, to the development of the chick, that if the blunt end of the egg be pierced with the point of the smallest needle, the egg cannot be hatched. The freshness of the egg may be easily ascertained, by the small circle denoting freshness, and the large circle the contrary. The shell of the egg is principally composed of carbonate of lime, with a small portion of phosphate of lime, the deficiency of which is what causes the shell of the egg to be thin or soft.

FOR HATCHING,

You will recollect the eggs must be rendered reproductive, from previous threading of the cock, as well as being fresh, and not exposed to bad effluvia or moisture, and while collecting, previous to hatching, covered with bran. Some say pointed eggs produce cocks, and round ones hens; and others, that if the vacancy caused by the air-bag, at the blunt end of the egg, appear to be a little on one side, it will produce a hen; if this vacancy be exactly in the centre, it will produce a cock. Not having faith in the above, I quote it for the advantage of those who may wish to test its authenticity. If fresh eggs are laid, after the hen begins to sit, they should be forthwith removed; and if she break any of her clutch, they should be carefully cleaned away, and her feathers, if soiled by the broken egg, made perfectly clean. Old hens are, in general, better sitters than pullets; and middle-sized, plump hens better than the very large ones. The clucking of the hen, when she has an inclination to sit, cannot be mistaken. It is best to have a few valueless eggs to put under a hen, for a few days, to ascertain if she will sit steadily, before you intrust a valuable clutch to her; when you do, give her the eggs intended to be hatched.

IN HATCHING,

Most persons prefer an odd number, the odd egg being placed in the centre, and the rest round it—say seven, nine, eleven, thirteen —according to the size of the hen, extent of her wings, and season of the year. If the hen, after sitting, lay more eggs, they should be immediately removed, as they will be too late for hatching; and if by accident or otherwise, she break any of the clutch, they should be carefully cleared away, and her feathers examined and cleansed, lest they adhere to, and destroy more of the eggs, or give her an inclination to break, and, perhaps, devour them. The clucking of the hen, which indicates a desire to sit, is too well known to require any description. If your eggs are of a particularly fine kind, it may be desirable not to put them under the hen, till you have satisfactorily found her to be a steady sitter, by having some eggs, which you consider of no value, placed under her, for a day or two. If any get cracked during incubation, a small portion of paper, pasted on the cracked part, has been found to be a perfect preservative. Experience has proved, that the closer you imitate nature, the more certain you will be to succeed. If a hen lay out, in a private place, she is likely to produce a chick from every egg. It is found that eggs set on the ground, in a soft, sandy spot, with some short-cut, clean straw, in a quiet situation, free from other poultry, succeed best; the evaporation from the ground, seems necessary to the hatching, for the want of which, Mr. Cantelo recommends their being slightly damped with a sponge, on the top only, about mid-day, daily. After the tenth day the eggs should be closely inspected, and those that have not germinated removed; if any bad egg be discovered after this, it should likewise be withdrawn.

The following is an account of the progressive stages of the egg of a hen, during incubation:—

On the *third* day, the embryo organization of the skull, brain, heart, and blood is prcepetible, by the aid of a magnifying glass.

Fourth day—The pulsation of the heart is distinguishable by the naked eye.

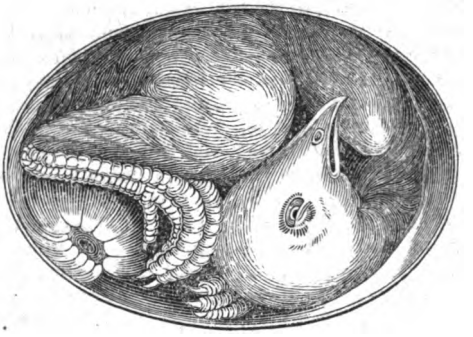
Sixth day—The chief vessels and organs rudimentally formed; the pulsation and circulation of the blood apparent.

Ninth day—Intestines and veins formed, and the deposition of flesh and bony substance commenced; the beak, for the first time opens.

Twelfth day—The feathers have protruded; the skull has become cartilaginous; and the first voluntary movement, of the chick, is made.

Fifteenth day—Organs, vessels, bones, feathers, closely approach in appearance to the natural state.

Eighteenth day—Vital mechanism nearly developed, and the first sign of life heard from the piping chick.



Twentieth day—The chick makes the above appearance.

Twenty-first day—The chick breaks the shell, and in two or three hours after is quite active and lively.

Some succeed in breaking the shell in an hour, while others take a longer time, the time of incubation being twenty-one days, at which period you should expect the chickens to be appearing; but should any of them be heard in the shell, for twelve hours after they should come out, you will have to assist them, by breaking the top of the shell; and if found to be glued to the shell by the white of the egg, the bird must be assisted to extricate itself, by the most gentle means, and but at small intervals, at a time, and during a lapse of from twelve to twenty hours—no hurry, no violence.

The day of their exclusion from the egg, the chickens do not want to eat, but should be left in a clean and comfortable nest. The next day they may be put into a coop or basket, with some clean and comfortable lining, and fed with soaked bread and milk, and egg boiled hard, and chopped fine; pure water is essential. When about a week old, turn them out in the sun, of a dry day, for a short time, and feed them with oatmeal, curd, chopped egg, and bread crumbs, with chickweed or lettuce cut small. When a fortnight old they may be permitted to follow the hen, where

she will scratch up insects for them, which are most nutritious. Economists in poultry, frequently add two clutches together, by putting the second under the hen at night, and then giving another clutch of eggs to hatch, to the second hen, or permit her to lay. The care of the hen is continued to the chickens, till they are enabled to provide for themselves, after which you are to reserve the largest and finest to continue your stock, of both cocks and hens, and use at the table, or send to market, the inferior.

ARTIFICIAL HATCHING

Has been practised, in China and Egypt, from an early period. The Egyptian method is mostly confined to the inhabitants of the village of Berne, and a few adjoining places in the Delta. The number of *mamals*, or hatching ovens, was, in the beginning of last century, 386; and the number of eggs hatched is reported to be from 40,000 to 80,000 in each. We have, therefore, to conclude, that the number of chickens hatched, in Egypt, annually amounts to nearly one hundred millions. They lay their account at two-thirds of the eggs put into the incubator producing birds. The difficulty after incubation, is the rearing of the chicks, which, if found to be successful, would considerably increase the supply of eggs, as the hen would be laying during the time of her hatching and rearing her young.

Having occasion to visit the great city of centralization, overgrown wealth, and extreme poverty, I was driven out by a friend to Chiswick, to visit Mr. Cantelo's Hydro-Incubator, or egg-hatching, and poultry-rearing establishment, and must confess, though I had no previous faith in it, it astonished me to see, at an inclement season, chickens of all ages, from just emerging from the shell to that of being ready for the table, and, most singular, each in perfect health—no drooping of wings, no moping in corners, no pip or roup—in fact, no disease to which poultry flesh is heir to. A lot of chickens, in large or small quantities, in such rude health, I have never seen; and there has been reared up in one building, and at one time, upwards of 1,300, all to be disposed of, from the London poulterers' shelves, and still not equal to the demand. The advantages are many, in comparison to hatching by the hen; in the first place, they have no hen to devour their dainty food, such as chopped egg, and oatmeal for the young ones; they have no hen to drag them through the ditches; they have no hen to trample them to death, and they

have no hens or larger chickens to peck at them; they have their artificial mother, kept up to the temperature of the natural mother; and it is beyond conception, how they will adhere to the warmth of the mother, prepared for them, and run in under the woollen cloth, as if it was natural to them. Each age has its separate compartment, with an opportunity, in fine weather, of passing out to a grass-plot; and you will see them enjoying themselves in the open air, and, when at all chilled, returning to the artificial mother, and making themselves perfectly comfortable.

My astonishment at the fine, healthy, and vast number of chickens produced by this means, has caused me to begin rather at the wrong end, having described the chickens before I have hatched them. The hatching apparatus is a table, the upper part of which is kept up to 106 degrees, and is padded with Indian rubber; the eggs are placed in a tray, with perforated bottom, and laid on a woollen cloth, and raised, to come in contact with the rubber, which sinks and covers the eggs as much as the natural mother is supposed to do; thus nature is represented as nearly as possible. After incubation, the artificial mother consists of a number of heated pipes, about an inch and a quarter in diameter, and about the same distance apart, resting on supporters, about five inches from the floor; beneath these pipes is a sliding-board, which is always at such a height as to allow the backs of the chickens to touch the pipes, and is gradually lowered as they increase in size. This board is removed and cleaned every day, or replaced by another, which had served the day before, and had been cleaned and aired during the twenty-four hours preceding; above the pipes (about an inch) is another board, similar to that below, from which descends a curtain in front of the mother; this board serves the double purpose of economizing the warmth, and preventing the chickens from dirtying each other, as they are fond of jumping on the mother, if not prevented. The young chickens having been once placed beneath this mother, will only leave it to eat, drink, and exercise, and return to it, of their own accord. The patentee, Mr. Cantelo, has had equal success in rearing turkeys, pea, and guinea fowl; and, although I have seen ducks in all quarters of Great Britain, I have never seen, in one lot, so fine a collection as those produced by the Hydro-Incubator.

Having, on my journey, visited the great aviary of the Earl of Derby, I there found the Incubator in its perfect working state, and was informed by his lordship's intelligent curator, it was most valuable for hatching out the eggs of foreign birds.

After rearing your chickens, your next consideration is

FATTENING

For table or market; it is best accomplished by cooping in a moderately warm, rather dark, quiet place, with good ventilation, and the fowl fed on boiled or steamed potatoes, into which oats or oatmeal, is blended with sweet milk, and some fine sand added, and given warm, but not hot—the fattening will be accomplished in a fortnight—or boiled carrots, with beans, peas, or barley and sweet milk; in all cases of cooping, the fowl must be kept dry, clean, and warm.

Nothing is easier kept than fowl; they obtain their living promiscuously, and pick up every thing that can be made use of as food, in the farm-yard, even the worms give them most nutritious food; and since the blight has proved so destructive to the potato crop, it has been satisfactorily proved, there is no substitute for it, as a feeder or fattener of poultry, or a promoter of laying; if the potatoes are broken, and if a little corn be added, they will be the more palatable; the more varied the food the better; boiled carrots, turnips, parsnips, Jerusalem artichokes, or other roots, boiled and mashed with bran, form a healthful variety; as to green food, they are partial to lettuce, endive, cabbage, spinach, radish, turnip, mangel-wurzel, chickweed, grass seeds, &c., and if insectivorous food is wished for, there is nothing more easily procured, at almost any season, by procuring a deep crock, into which put some bran, and on it lay a piece of carrion or other flesh, cover it with a glass cap so as to admit the light, but exclude the rain; in a few days it will be a moving mass of living insects, which you can throw out to your poultry; there is nothing they will so greedily devour; they should be sparingly given, as the fowl are so fond of them, that if given abundantly it will prevent them taking their usual food.

The Royal Dublin Society, having long wished for the introduction of the American turkey, I have been fortunate in procuring some fine specimens.

CHAPTER IV.

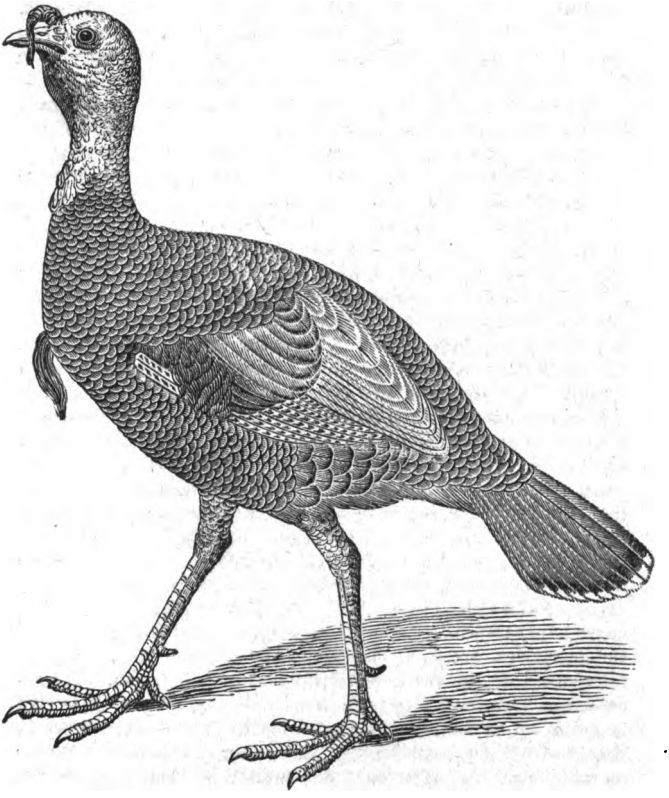
THE WILD TURKEY

Having proved an incalculable advantage, as a cross on our domestic bird, producing the great Norfolk, giving superior size and flavour, the Royal Dublin Society, in order to encourage the promotion of it, has offered a premium for its introduction. I have procured some specimens, which I exhibited at their show; the birds being little known, in this country, I am indebted to the valuable information of Prince Charles Lucien Bonaparte, John J. Audubon, and Alexander Wilson, from whose work I have endeavoured to make an abridged extract, which I hope will meet with the approbation of my readers.

In the following description we give the generic, as well as the specific, characters of the wild turkey, in order to make it complete.

THE MALE WILD TURKEY,

When fully grown, is nearly four feet in length, and more than five in extent. The bill is short and robust, measuring two inches and a half to the corner of the mouth; it is reddish, and horn colour at tip; the superior mandible is vaulted, declining at tip, and overhangs the inferior, being longer and wider. It is covered at the base by a marked, cere-like membrane, in which the nostrils are situated, they being half closed by a turgid membrane, and opening downwards. The inferior mandible slightly ascends towards the tip; the aperture of the ear is defended by a fascicle of small, decomposed feathers; the tongue is fleshy and entire; the irides are dark brown; the head, which is very small, in proportion to the body, and half of the neck, are covered by a naked, bluish skin, on which are a number of red, wart-like elevations, on the superior portions, and whitish ones on the inferior, interspersed with a few scattered, black, bristly hairs, and small feathers, which are still less numerous on the neck. The naked skin extends farther downwards on the inferior surface of the neck, where it is flaccid and membranous, forming an undulating appendage, on the lower part of which are cavernous elevations, or wattles, a wrinkled, fleshy, conic, extensible carbuncle, hairy and pencellated at tip, arises from the bill, at its junction with the forehead. When the bird is quiescent, this process is not much more than



THE MALE WILD TURKEY.

an inch and half long, but when he is excited by love or rage, it becomes elongated, so as to cover the bill entirely, and depend two or three inches below it. The neck is of a moderate length and thickness, bearing on its inferior portion a pendent fascicle of black, rigid hairs, about nine inches long. The body is thick, somewhat elongated, and covered with long, truncated feathers. These are divided into very light fuliginous down at base, beyond which they

are dusky. To this dusky portion succeeds a broad, effulgent, metallic band, changing now to copper-colour or bronze gold, then to violet or purple, according to the incidence of light, and at tip is a terminal, narrow, velvet, black band, which does not exist in the feathers of the neck and breast. The lower portion of the back, and the upper part of the rump, are much darker, with less brilliant golden violaceous reflections. The feathers of the inferior part of the rump have several concealed, narrow, ferruginous, transverse lines, then a black band before the broad metallic space, which is effulgent coppery. Beyond the terminal narrow black band, is an unpolished bright bay fringe. The upper tail coverts are of a bright bay colour, with numerous narrow bands of shining greenish. All these coverts are destitute of the metallic band, and the greater number have not the black, subterminal one. The vent and thighs are plain, brownish cinerous, intermixed with paler. The under tail coverts are blackish, glossed with coppery towards the tip, and at tip are bright bay.

The wings are concave, and rounded, hardly passing the origin of the tail; they have 28 quill feathers, of which the first is shortest, and the fourth and fifth longest; the second and ninth being nearly equal. The smaller and middling wing coverts are coloured like the feathers of the body, the greater coverts are copper violaceous, having a black band near the whitish tip. Their concealed web is blackish, sprinkled with dull ferruginous. In old birds the exterior web is much worn by friction amongst the bushes, in consequence of which those feathers exhibit a very singular unwebbed curved appearance. The spurious wing, the primary coverts, and the primaries, are plain blackish, banded with white, which is interrupted by the shaft, and sprinkled with blackish. The secondaries have the white portion so large that they may as well be described as white banded with blackish, and are, moreover, tinged with ferruginous yellow; this colour gradually encroaches on the white, and then on the blackish, in proportion as the feathers approach the body, so that the tertials are almost entirely of that colour, being only sprinkled with blackish, and having metallic reflections on the inner web. The anterior under wing coverts are brownish black, the posterior ones being gray. The tail measures more than a foot and a quarter; is rounded and composed of eighteen wide feathers. It is capable of being expanded and elevated, together with the superior tail coverts, so as to resemble a fan, when the bird parades, struts, or wheels. The tail is ferruginous, mottled with black, and crossed by numerous narrow, undulated lines of the same colour, which become confused on the

middle feathers; near the tip is a large black band, then the feathers are again mottled for a short distance, and are widely tipped with ferruginous yellow. The feet are robust and somewhat elongated; the tarsus measures more than six inches in length, being covered before by large alternate pentagonal plates, and furnished on the inner posterior sides, with a rather obtuse, robust, compressed spur, nearly one inch long. The toes are three before, connected at base by a membrane, and one behind, touching the ground, only at tip, being articulated higher on the tarsus than the others, and one-half shorter than the lateral toes, which are equal; the middle toe is more than four inches long, and the posterior but little more than an inch; they are all covered by entire plates. The sole is granulated; the colour of the foot is red; the margins of the plates and scales, the membrane and nails being blackish, the nails are oblong, wide, obtuse at tip, rounded above, and perfectly plain beneath. The female or hen turkey is considerably smaller in size, being three feet and a quarter long. The bill and feet resemble those of the male, but are proportionally smaller, the latter being destitute of even a rudiment of spur. The irides are like those of the male; the head and neck are not so naked as in that sex, but are covered by small decomposed feathers, of a dirty grayish colour; those of the back of the neck are tipped with ferruginous, constituting a longitudinal vitta on that part. The caruncle on the frontlet is rudimental, not susceptible of being elongated; the pectoral appendage is entirely wanting in our specimen; the general plumage is dusky gray, each feather having a metallic band, less brilliant than that of the male, then a blackish band and a grayish terminal fringe; the black subterminal band is obsolete on the feathers of the neck, and of the whole inferior surface. Those of the latter part, with the feathers of the lower portion of the back of the rump, and the flanks, have their tips yellowish, ferruginous, becoming gradually brighter towards the tail; the vent and thighs are dirty yellowish gray, without any reflections; the under tail coverts are tipped, and varied with rather deep ferruginous. The superior tail coverts are like those of the male, but duller, and tipped with a broad whitish ferruginous fringe. The wings are also duller, each covert being tipped grayish, less white exists on the primaries, the bands being narrower, and the secondaries entirely destitute of them; the tail is similar in colour to that of the male.

The wild turkey inhabits the entire extent from the north-western territory of the United States, to the Isthmus of Panama, south of which it is not to be found, notwithstanding the statements of

authors, who have mistaken the Curassow for it. In Canada, and the now densely peopled parts of the United States, wild turkeys were formerly very abundant, but like the Indian and buffalo, they have been compelled to yield to the destructive ingenuity of the white settlers, often wantonly exercised, and seek refuge in the remotest part of the interior. Although they relinquish their native soil with slow and reluctant steps, yet such is the rapidity with which settlements are extended, and condensed over the surface of this country, that we may anticipate a day, at no distant period, when the hunter will seek the wild turkey in vain.

The wooded parts of Arkansaw, Louisiana, Tennessee, and Alabama; the unsettled portions of the State of Ohio, Kentucky, Indiana, and Illinois; the vast expanse of territory north-west of these States, on the Mississippi and Missouri, as far as the forests extend, are more abundantly supplied than any other parts of the union, with this valuable game, which forms an important part of the subsistence of the hunter and traveller in the wilderness. It is not probable that the range of this bird extends to, or beyond the Rocky Mountains. The Mandan Indians, who, a few years ago, visited the city of Washington, considered the turkey one of the greatest curiosities they had seen, and prepared a skin of one to carry home for exhibition.

The wild turkeys do not confine themselves to any particular kind of food. They eat maize, all sorts of berries, fruits, grasses, beetles, and, even, tadpoles, young frogs, and lizards, are occasionally, found in their crops; but where the pecan nut is plenty, they prefer that fruit to any other nourishment; their more general predilection is, however, for the acorn, on which they rapidly fatten. Where an unusually profuse crop of acorns is produced, in a particular section of country, great numbers of turkeys are enticed from their ordinary haunts, in the surrounding districts. About the beginning of October, while the mast still remains on the trees, they assemble in flocks, and direct their course to the rich, bottom lands. At this season, they are observed in great numbers on the Ohio, and Mississippi; the time of this irruption is known, to the Indians, by the name of the *turkey month*. The males, usually termed *gobblers*, associate in parties, numbering from ten to a hundred, and seek their food apart from the females; whilst the latter either move about, singly, or with their young, then nearly two-thirds grown, or in company with other females and their families, form troops, sometimes consisting of 70 or 80 individuals, all of whom are intent on avoiding the old males, who, whenever opportunity offers, attack and destroy the young, by

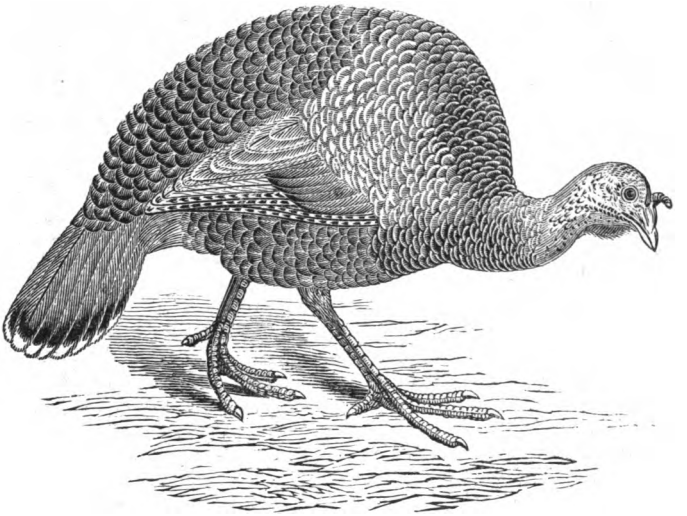
repeated blows on the skull. All parties, however, travel in the same direction, and on foot, unless they are compelled to seek their individual safety by flying, from the hunter's dog, or their march is impeded by a large river. When about to cross a river, they select the highest eminence, that their flight may be the more certain, and here they sometimes remain, for a day or more, as if for the purpose of consultation, or to be duly prepared for so hazardous a voyage. It has been observed that after these long journeys the turkeys become so familiar, as to venture on the plantations, and even approach so near the farm-houses, as to enter the stables and corn cribs, in search of food; in this way they pass the autumn and part of the winter; during this season great numbers are killed by the inhabitants, who preserve them, in a frozen state, in order to transport them to a distant market.

Early in March they begin to pair, and for a short time previous, the females separate from, and shun their mates, though the latter pertinaciously follow them, uttering their gobbling notes. During this ceremonious approach the males often encounter each other, and desperate battles ensue, when the conflict is only terminated by the flight, or death, of the vanquished. This pugnacious disposition is not to be regarded as accidental, but as resulting, from a wise and excellent law of nature, which always studies the good of the species, without regard to the individuals. Did not females prefer the most perfect of their species, and were not the favours of beauty, most willingly dispensed to the victorious, feebleness and degeneracy would soon mark the animal creation; but, in consequence of this general rule, the various races of animals are propagated by those individuals who are not only most to be admired for external appearance, but most to be valued for their intrinsic spirit and energy.

About the middle of April when the weather is dry,

THE FEMALE WILD TURKEY

Selects a proper place in which to deposit her eggs, secured from the encroachment of water, and, as far as possible, concealed from the watchful eye of the crow. This crafty bird espies the hen going to her nest, and having discovered the precious deposit, waits for the absence of the parent, and removes every one of the eggs, from the spot, that he may devour them at leisure. The nest is placed on the ground, either on a dry ridge, in the fallen top of a dead, leafy tree, under a thicket of sumack or briars, or by the side of a log. It is of a very simple structure, being composed of a few



THE FEMALE WILD TURKEY.

dried leaves. In this receptacle the eggs are deposited, sometimes to the number of twenty, but more usually from nine to fifteen. They are whitish, spotted with reddish-brown, like those of the domestic bird. Their manner of building, number of eggs, period of incubation, &c., appear to correspond throughout the Union, as I have received exactly similar accounts from the northern limits of the turkey range, to the most southern regions of Florida, Louisiana, and the wilds of Missouri. The female always approaches her nest with great caution, varying her course so as rarely to reach it twice by the same route, and on leaving her charge, she is very careful to cover the whole with dry leaves, with which she conceals it so artfully as to make it extremely difficult, even for one that has watched her movements, to indicate the exact spot; hence few nests are found, and these are generally discovered by fortuitously starting the female from them, or by the appearance of broken shells scattered around, by some cunning lynx, fox, or crow. When laying or sitting, the turkey hen is not readily driven

from her post, by the approach of apparent danger; but if an enemy appears, she crouches as low as possible, and suffers it to pass. A circumstance related by Mr. Audubon, will show how much intelligence they display on such occasions. Having discovered a sitting hen, he remarked, that by assuming a careless air, whistling, or talking to himself, he was permitted to pass within five or six feet of her, but if he advanced cautiously, she would not suffer him to come within twenty paces, but ran off, twenty or thirty yards, with her tail expanded, when, assuming a stately gait, she paused on every step, occasionally uttering a chuck. They seldom abandon their nests, on account of being discovered by man; but should a snake, or any other animal suck one of the eggs, the parent leaves them altogether. If the eggs be removed, she again seeks the male, and recommences laying, though otherwise she lays but one nest of eggs during the season. Several turkey hens sometimes associate, perhaps for mutual safety, deposit their eggs in the same nest, and rear their broods together. Mr. Audubon once found three females sitting on forty-two eggs. In such cases the nest is constantly guarded by one of the parties, so that no crow, raven, or even polecat dares approach it. The mother will not forsake her eggs, when near hatching, while life remains. She will suffer an enclosure to be made around, and imprison her, rather than abandon her charge. Mr. Audubon witnessed the hatching of a brood while thus endeavouring to secure the young and mother. I have lain flat, says he, within a very few feet, and seen her gently rise from the eggs, look anxiously towards them, chuck with a sound, peculiar to the mother on such an occasion, remove carefully each half-empty shell, and, with her bill, caress and dry the younglings, that already stand tottering and attempting to force their way out of the nest. The time then approaches in which they seek the open ground or prairie land during the day, in search of strawberries, and, subsequently, dewberries, blackberries, and grasshoppers, thus securing a plentiful food, and enjoying the influence of the genial sun. They frequently dust themselves in shallow cavities of the soil, or on ant-hills, in order to clean off the loose skin off their growing feathers, and rid themselves of ticks and other vermin.

Wild turkeys having been observed by Bartrim, he says—"Having seen a flock of them, at some distance, I approached them with great caution, when, singling out a large cock, and being just on the point of firing, I observed that several young cocks were affrighted, and, in their language, warned the rest to be on their guard, against an enemy, whom I plainly perceived,

was industriously making his subtle approaches towards them, behind the fallen trunk of a tree, about twenty yards from me. This cunning fellow-hunter was a large, fat, wild cat, or lynx; he saw me, and, at times, seemed to watch my motions, as if determined to seize the delicious prey before me, upon which I changed my object and levelled my piece at him; at that instant, my companion, at a distance, also discharged his piece, the report of which alarmed the flock of turkeys, and my fellow-hunter, the cat, sprang over the log, and trotted off."

On hearing the slightest noise, wild turkeys conceal themselves in the grass, or among shrubs, and thus frequently escape the hunter, or the sharp-sighted birds of prey. The sportsman is unable to find them during the day, unless he has a dog trained for the purpose. It is necessary to shoot them at a very short distance, since, when only wounded, they quickly disappear, and, accelerating their motion by a sort of half-flight, run with so much speed, that the swiftest hunter cannot overtake them. The traveller, driving rapidly down the declivity of one of the Alleghanies, may sometimes see several of them before him, that evince no urgent desire to get out of the road, but on alighting, in hopes of shooting them, he soon finds that all pursuit is vain.

The more common mode of taking turkeys is by means of pens, constructed with logs, covered in at top, and with a passage in the earth, under one side of it, just large enough to admit an individual when stooping. The ground chosen for this purpose is generally sloping, and the passage is cut on the lower side, widening outwards. These preparations being completed, Indian corn is strewed for some distance around the pen, to entice the flock, which, picking up the grain, is gradually led towards the passage, and thence into the enclosure, where a sufficient quantity of corn is spread to occupy the leader until the greater part of the turkeys have entered. When they raise their heads and discover that they are prisoners, all their exertions to escape are directed upwards, and against the sides of the pen, not having sagacity enough to stoop sufficiently low to pass out by the way they entered, and thus they become an easy prey, not only to the experienced hunter, but even to the boys on the frontier settlements.

In proportion to the abundance or scarcity of food, and its good or bad quality, they are small or large, meagre or fat, and of an excellent or indifferent flavour; in general, however, their flesh is more delicate, more succulent, and better tasted than that of the tame turkey. They are in the best order, late in autumn, or in the beginning of winter. The Indians value this food so highly,

when roasted, that they call it the white man's dish, and present it to strangers, as the best they can offer.

The first unquestionable description of the turkey was written by Oviedo, in 1525, in the summary of his history of the Indies. This bird was sent from Mexico to Spain early in the sixteenth century. From Spain it was introduced into England, in 1524. Turkeys were taken to France in the reign of Francis the First, whence they spread into Germany, Italy, &c. A few, however, had been carried to the latter country, by the Spaniards, some years previously. The first turkey, eaten in France, appears to have been served up at the wedding banquet of Charles the Ninth, in the year 1570. Since that period they have been bred with so much care, that, in England, as we read in ancient chronicles, their rapid increase rendered them attainable at country feasts, where they were a much-esteemed dish. As early as 1585, Europeans conveyed them to all their colonies, and thus were they gradually introdued into Asia, Africa, and even Oceanica.

In connection with the peculiar character of this bird, we may advantageously quote the sentiments of the great Franklin, who expressed a regret that the turkey should not have been preferred to the bald eagle, as an emblem of the United States. Certainly this eagle is a tyrannical and pusillanimous bird, by no means an appropriate representative of a great and magnanimous nation, as was the eagle, chosen by the Romans.

Those who have not observed the turkey in its wild state, have only seen its deteriorated progeny, which are greatly inferior in size and beauty. So far from having gained by the care of man, and the abundance of food accessible in its state of domestication, this bird has degenerated, not only in Europe and Asia, but what is certainly extraordinary, even in its native country.

The domesticated turkey of America, accustomed as it is, to roam in the woods and fields, almost without restraint, is in no respect superior to that of the European poultry-yard; I have, however, seen several very beautiful ones from Lancaster County, Pennsylvania, and Sussex County, New Jersey, that were said to be a cross breed between the wild cock and the tame hen. This crossing often occurs in countries where wild and tame turkeys are to be found; and such is the influence of slavery, even upon the turkey, that the robust inhabitant of the forest, will drive his degenerate kinsfolk from their own food, and from their females, being generally welcomed by the latter, and by their owners, who well knew the advantages of such a connection.

The produce of this commixture is much esteemed by epicures,

uniting the luscious obesity of the one, with the wild flavour of the other. A gentleman, residing in Westchester County, New York, a few years since procured a young female, wild turkey, in order to make the experiment of crossing the breed; but, owing to some circumstances, it did not succeed, and in the ensuing spring, this female disappeared; in the following autumn she returned, followed by a large brood; these were quite shy, but, by a little management, they were secured in a coop, and the mother allowed her liberty; she remained on the farm until the succeeding spring, when she again disappeared, and returned in the autumn, with another brood. This course she has repeated for several successive years.

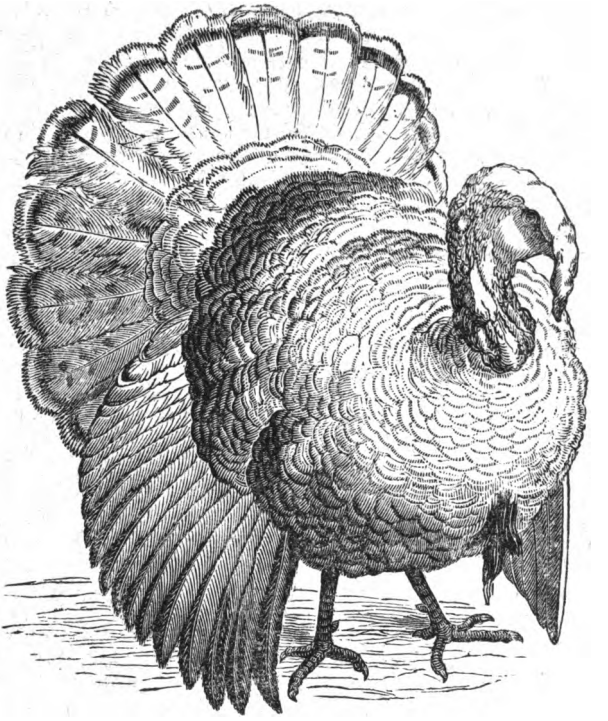
The domesticated young, reared from the eggs of the wild turkey, are often employed as decoy birds, to those in a state of nature. Mr. Wm. Bloom, of Clearfield, Pennsylvania, caught five or six wild turkeys, when quite chickens, and succeeded in rearing them. Although sufficiently tame to feed with his tame turkeys, and generally associate with them, yet they always retained some of their original propensities, roosting by themselves, and higher than the tame birds, generally on the top of some tree, or of the house; they were also more readily alarmed. Mr. Bloom remarked, that the wild turkey will thrive more, and keep in better condition, than the tame, on the same quantity of food.

THE OCELLATED TURKEY

Is a distinct variety from the preceding, found in Honduras, of beautiful plumage, and, as its name indicates, the feathers are eyed like those of the peacock. A stuffed specimen was exhibited by Mr. Bullock, at the Egyptian Hall, but at the breaking up of that establishment, was removed to the Jardin de Plants, at Paris, since which, some living specimens have been introduced, one of which I saw, in the possession of the Earl of Derby, of which the following is a description:—

In size, it is nearly equal to the common turkey, but the tail is not so ample. The bill is of the same form, and the base with a caruncle, which is capable of the same dilation and contraction, with that of its congener. The head and two-thirds of the neck are naked, and appear of the same livid colour, but without any trace of the fleshy tubercles on the lower part, which are so prominent a feature in the physiognomy of the common turkey. The only appearance of any is five or six above each eye, five upon the centre of the crown, and upon the side of the neck,

six or seven arranged in a line above each other, and at nearly equal distances. Upon the breast there is no trace of the tufts of hair. The form of the feathers is rounded at the ends; those of the lower part of the neck, the upper part of the back, scapulars, and all the lower part of the body, are of a bronzed green, terminated by two bands, the one black, and the other, or that next the tip, of a golden bronze colour. On the other parts of the back, the distribution of the colours is the same, but as they approach the coverts of the tail, the tints become more vivid—the bronzed part becomes of a rich blue, or emerald green, according to the change of light, and the outer band becomes broader, assumes a more golden lustre, and upon the rump, being tinted with red, the shades become similar in beauty to the throat of the Ruby-crested Humming-bird. The brightness of this border becomes still more striking, being separated from the blue by a band of deep velvety black. The base of such feathers on those parts concealed is gray, mottled with black. Upon the tail and upper coverts, this gray part becomes apparent, and the marks assume the form of bars, one of which, immediately succeeding the blue band, surrounds it, and makes each feather appear eyed or ocellated. From the distribution of the tail coverts, and lower feathers of the rump, there are four rows with these eyed tips, where the gray basal half of the feather is visible, and which combines very chastely, or keeps down, as it were, the lustre of the others. The tail is rounded at the end, and contains only fourteen feathers. The lower parts of the body are banded with bronze, black and green, but without the brilliant lustre of the upper parts. The quills and bastard pinions are broad, bordered obliquely with white, which almost entirely occupy the outer margin of the first. The secondaries have the outer barbs pure white—the bands in the centre not appearing when the wings are closed; the uppermost are blotched in the centre with black, having a green lustre, which, as the plumes shorten, expand more over their surface, leaving the last with the edge only white. The greater coverts are chestnut; the feet and legs are of a rich lake, or purplish red. Its plumage is more varied, brilliant, and beautiful, than that of any other turkey.



THE DOMESTIC TURKEY

Is one of the most important fowls. The colours are various—the copper, the white, the bronze, the black, and the marginated. The copper has been long esteemed; the white are beautiful, of large size, and tender flesh, and their feathers converted to various articles of commerce. The Norfolk is usually black, with an iridescent, metallic lustre, and, being crossed by the wild American, is now considered our first breed. I have had one to weigh 37 lbs.; it was frequently weighed in the demesne of William Perry, Esq., of Stillorgan Park, Co. Dublin, and as often found to be of that weight; and it is singular, that from this bronzed stock, I have

had some produced entirely white, and of equal size with the darker colours.

The turkey was seen in America, by the first discoverers, and entitled by the Spanish doctor Fernandez, *Gallus Indicus* and *Gallus pavo*—the peacock of the Indies. They were both in a wild and domesticated state in America, on the arrival of the Spaniards, the wild being represented as of the largest size, reaching even the weight of 60 lbs., and of a superior flavour, but the flesh of a red colour.

The antipathy which the turkey-cock entertains for anything of a red colour is well known. The county of Norfolk breeds the largest quantity of these fowls for market, which, in the season, is transferred to London, in both a living and dead state. The number of turkeys sent from Norwich to London about Christmas is said to be about five thousand, weighing about thirty tons.

In putting turkeys together for breeding, you may give six hens to a cock. The hens usually lay from eighteen to twenty-five eggs, and upwards; she will cover from nine to fifteen eggs, and requires to be watched, lest she lay in some secret place abroad; she generally lays in the morning, of every second day; thirteen eggs is a sufficient clutch; her term of incubation is thirty-one days; she sits steadily, and requires attention, lest she starve on the nest. The timidity of the turkey-hens, when sitting, makes it indispensable that no one approach them, either near the nest, or outside the habitation, except the person who usually gives them meat and drink. While the hen is sitting the absence of the cock is desirable, as he will sometimes be inclined to tear her from her nest, and destroy her eggs; and when the chicks make their appearance, she proves a most affectionate parent, but requires to be restrained, lest her wandering propensity bring them into difficulties, from which they cannot be recovered. The chicks must be withdrawn from the nest, as soon as hatched, and kept warm. Give them no food for eight or ten hours; their first food should be curd or egg, boiled hard, and chopped. The hen and brood must be housed during a month or six weeks, dependent upon the state of the weather; their second food should be oat or barley meal, kneaded with milk, and frequently renewed, with clear water, boiled rice, mixed with cress, lettuces, and the green of onions, bullock's liver, boiled and minced. If the chicks appear sickly, from any change in the weather, give them half-ground malt, with barley-meal, and, by way of medicine, powdered carraway or coriander seeds; also, lean meat, cut small, as a substitute for insectiverous matter; this is a good food for all species

of young poultry. They must be kept particularly clean, and a layer of fine, dry gravel, or sand, left for them, with a fresh tuft of short, sweet grass. Too much milk is a purgative to all birds. When the chicks are three or four weeks old, coop the hen abroad for a couple of hours, daily, in fine weather, with a moderate sun. When six weeks old, coop the hen out of doors, daily, for a fortnight, that the chicks may obtain strength before the hen is set at large. When half grown, and well feathered, they become sufficiently hardy, and, in a good range, will provide themselves throughout the day, requiring only to be fed at their out-letting in the morning, and on their return at evening—the same in spacious farm-yards. If confined to the poultry-yard, their food and treatment are similar to the common cock and hen. Turkeys would prefer roosting abroad, upon high trees, in the summer season, could it be permitted, with a view to their safe keeping.

Breeders complain of the difficulty of rearing turkeys. That can be obviated, by keeping the chicks dry; they will not bear to be draggled through the ditches, or subject to the rain; and after shooting what is called the *red*, which, at a certain age, becomes the colour of the head, they become hardy, and evince a desire to perch in the open air—a circumstance which should not be permitted, till they are two or three months old. Open sheds are, consequently, best suited to them, with roosting-bars, fixed as high as convenient, from the ground; if housed, they require a roomy place, well ventilated, and cleaned.

If you can take the chicks from any of your hens, and add them to another clutch, the hen from which you take them will speedily begin to lay, and have a second clutch about July.

They evince their wild propensity, if in the neighbourhood of a wood; they will stray away and procure their food, at all seasons of the year. Our Irish climate is said to agree better with them than that of England. A turkey loses a third of its weight when ready for the spit. Live weight, 21 lbs; dead weight, 14 lbs.

Turkeys are said to be the most difficult to rear of any of our domestic fowl, but with due care and attention, which, rightly considered, in all things, give the least trouble, they may be produced and multiplied with no loss; and the same may be averred, with all truth, of the rest of our domestic fowl, the losses and vexations annually deplored, arising almost entirely from ignorance and carelessness. Turkeys, as well as geese, under a judicious system, may be rendered an object of a certain degree of consequence to the farmer. The feathers of the white turkey are a valuable article of commerce in the London market

In the south of France the white turkey is preferred, as being more robust, more easily reared and fattened, and always more marketable, it being said their skin is whiter, their flesh finer and sweeter, while the males are larger, and the females better feeders. The turkey does not come to its full size until the fifth or sixth year, or not perfect plumage until the seventh. It has been ascertained beyond a doubt, that a single service of the cock is sufficient for the whole season, but there may be cases in which it has been unsuccessful.

Barley-meal, mixed with water, is the best fattening food, to which add a turnip, with the leaves on, or cabbage; in a park with plenty of mast, they will get abundantly fat without other food.

It is said that vetches or tares, marrow-fat peas, and most sorts of pulse are deleterious to them, which appears singular, as they agree with many other fowl, pigeons, &c. The seed of the henbane, foxglove, and hemlock, should be particularly avoided, from their poisonous qualities.

CHAPTER V.

ORNAMENTAL FOWL.

"How rich the peacock! what bright glories run
From plume to plume, and vary in the sun!
He proudly spreads them to the golden ray;
Gives all his colours, and adorns the day!
With conscious state the spacious round displays,
And slowly moves, amid the waving blaze."

THE PEA FOWL

Are the most gorgeous of the whole feathered tribe; the male bird is characterized by the very great development of the upper tail coverts, or train, which it is enabled to raise, and spread in a circle, by means of the true tail. There are two species known, both inhabitants of the continent and islands of India; and, although it is so familiar to our view, as to lessen our admiration of it, still it has no competitor, as being "the most splendid bird."

The common people of Italy describe the peacock as having the plumage of an angel, the voice of a devil, and the guts of a thief. They were first brought from the East Indies, where they are still found in vast flocks, in a wild state; the head of the bird most familiar to us, is adorned with a tuft of twenty-four feathers, whose shafts are entirely bare, tipped with eyes of green and gold; the head, throat, neck, and breast, are of a deep blue, adorned with green and gold; the greater coverts and bastard wings are of a reddish brown, as are also the quills, some of which are variegated with black and green; the belly and vent are black, with a greenish hue; but the distinguishing character of this singular bird is in its train, which rises just above the tail, and, when erected, forms a fan of the most splendid hues; the two middle feathers are sometimes four feet and a half long, the others gradually diminishing on each side; the shafts white, and furnished from their origin, nearly to the end, with parted filaments of various colours, ending in a flat vane, which is decorated with what is called the eye; the real tail consists of short, stiff, brown feathers, which serve as a support to the train.

When pleased or delighted, or in the sight of his females, the peacock erects his train, and displays all the majesty of his beauty; all his movements are full of dignity; his head and neck bend nobly back; his pace is slow and solemn, and he frequently turns slowly and gracefully round, as if to catch the sunbeams in every direction, and produce new colours of inconceivable richness and beauty, accompanied, at the same time, with a hollow, murmuring voice, expressive of desire; the cry of the peacock, at other times, is often repeated, and very disagreeable. The plumes are shed every year, and while moulting them, the bird, as if humiliated, retires from view.

They are frequently found entirely white, which occurs in a wild state, as well as in domestication, and is not caused, as was alleged by some, from being transported from a warm to a temperate or cold climate; this colour is, however, much more frequent in domestication, than in its native country. Pied varieties are sometimes seen; and when the deep blue of the neck and breast is contrasted, with pure white, they form a beautiful appearance, and are much sought for by collectors. In the white variety, the feathers, from retaining their structure, exhibit the eyes, and all the markings of the tail, and other parts, distinctly, accordingly as the light falls upon them.

The splendour of this bird has attracted the notice of the earliest historians. At a remote period of English history, when

the baronial entertainments were characterized by grandeur and pompous ceremonies, approaching nearly to the magnificence of royalty, there was scarcely any noble feast without peacocks, which were stuffed with spices and sweet herbs, roasted and served up whole, and covered, after dressing, with the skin and feathers. In our own times, both the young and the eggs are often seen at the tables of the opulent. They are also reared as picturesque accessories to the park or lawn, in which they will breed and rear their young without assistance, and, with a little attention, only in the winter.

Peacock-shooting is a favourite amusement in India, where, in some parts, they are extremely abundant. "About the passes in the Jungletery district," says Colonel Williams, "I have seen such quantities of peafowl, as have absolutely surprised me. Whole woods were covered with their beautiful plumage, to which a rising sun imparted additional brilliancy. I speak within bounds, when I assert, that there could not be less than twelve or fifteen hundred pea-fowl, of various sizes, within sight of the spot, where I stood for near an hour."

Like other birds of the poultry kind, the peacock feeds upon corn, but its chief predilection is for barley. There is, however, scarcely any food that it will not at times covet and pursue. In the indulgence of these capricious pursuits, walls cannot easily confine it. It strips the tops of houses of their tiles or thatch; it lays waste the labours of the gardener, roots up the choicest seeds, and nips his favourite flowers in the bud. Thus its beauty ill recompenses for the mischief it occasions, and many of the most homely-looking fowls are very deservedly preferred before it. One cock is sufficient for four hens.

The peahen makes her nest on the ground, and seldom lays above five or six eggs, in this climate, before sitting; it is asserted, however, that she sometimes lays twelve. Her term of incubation is thirty days. The chicks are very tender, the least cold or wet being almost certain to kill them, and, therefore, they will require to be tended with great care, similar to pheasants or turkeys. The best food for them is new cheese or curd, prepared from milk, with alum, ants' eggs, meal-worms, and hard-boiled yoke of egg. When older, they will, like the old birds, feed on boiled barley, or other grain of any sort. They are voraciously fond of reptiles, and will keep a place clear of frogs, lizards, and the like. When in moult, give them honey, wheat, coarse-ground beans, and oats, with fresh water. In the forests, where they breed in a wild state, they are numerous beyond expression.

They live about twenty years, and not till its third year has the cock that beautiful variegated plumage that adorns his tail.

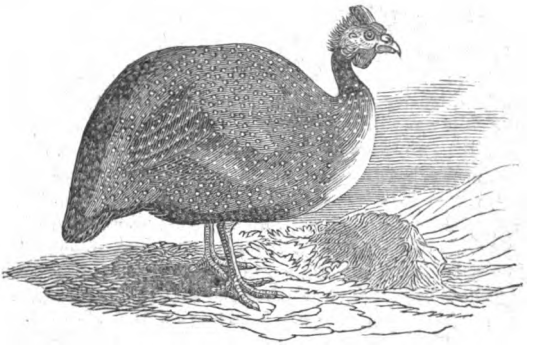
THE JAVANESE PEA FOWL

May be considered as a recently-introduced bird. About the commencement of the present century, Doctor Shaw gave, in his Zoological Miscellany, a figure, taken from an Italian drawing, sent home by a friend; and in the year 1813, M. Temminck, in the second volume of his "Histoire Naturelle des Gallinaces," published a sketch of the head, with a description, taken by Le Vaillant, from a living individual, seen by him at the Cape of Good

Hope, whither it had been sent from Macao. It was subsequently observed by Dr. Hosefield, in Java, as well as by Sir Stampford Raffles, in Sumatra. There are some living specimens in the London Zoological Society's collection. We have had some at our Zoological Gardens, in Dublin, and I was in possession of some myself: they are now not very rare.

The principal distinguishing characters of the peacocks, as a genus, consist in the peculiar crest upon their heads, and the excessive elongation of their tail coverts and tail feathers, which are capable of being elevated and expanded, and in this position, form one of the most beautiful objects in creation. The bill is of moderate size, slightly curved, with open nostrils, placed near its base; the head is almost wholly feathered; the legs are armed with strong, conical spurs; the hind toe touches the ground only with its claw; and the wings are short and concave, the sixth quill feather being the longest of the series. In the species now under consideration, the prevailing tints are blue and green, varying in intensity, and mutually changing into each other, as the light falls more or less directly upon them. In size and proportions, the two birds are nearly similar; but the crest of the present species is twice as long as that of the other: and the feathers of which it is composed, are regularly barbed from the base upwards, in the adult bird, and of equal breadth throughout; the head and crest are interchangeably blue and green; a naked space on the cheeks, including the eyes and ears, is coloured of a light yellow behind, and bluish-green towards its fore-part; the feathers of the neck and breast, which are broad, short, rounded, and imbricated, like the scales of a fish, are, at their base, of the same brilliant hue as the head, and have a broad, lighter, somewhat metallic margin; those of the cock have still more of the metallic lustre; the wing coverts are of the general hue, with a deeper tinge of blue; the primary quill feathers are light chesnut; the tail feathers and their coverts are of a splendid metallic brown, changing into green; their barbs are extremely long, loose, silky, and somewhat decomposed, and the latter are almost all terminated by similar ocellated spots, to those which mark the tail of the common species, and of nearly the same size. In it they are of a beautiful deep purple, in the centre, which is about the size of a shilling; this is surrounded by a band of green, becoming narrow behind, but widening in front, and filling up a kind of notch that occurs in the blue: then comes a broad, brownish band; and, lastly, a narrow, black ring, edged with chesnut, all beautifully metallic, or rather presenting the hues of various

precious stones, when viewed in certain lights. The bill, which is of a grayish horn colour, is rather longer and more slender than in the common species; the iris is deep hazel; the legs are strong, naked, reticulated, and of a dusky black; and the spurs, which are extremely large, are of the same hue. It is a curious fact, that, although the cock of this species is much darker in colour than the common peacock, the hen, on the contrary, is much lighter in colour than the common peahen. We have no particulars of the habits of these birds in their native state, but there can be no doubt, that they are identical with those of the other species, as there seems to be but little difference between their manners in captivity.



THE PINTADO, OR GUINEA FOWL,

In some measure unites the characteristics of the pheasant and the turkey: it has the fine, delicate shape of the one, and the bare head of the other. It is about the size of the common hen, but being supported on longer legs, it appears larger. During the zenith of the Roman Empire, they bore a high value at the public feasts, and, with its decline, were for a time lost to Europe, to which they were again most probably introduced by the early Spanish navigators. It has a round back, with a tail turned downwards, like a partridge. The head is covered with a kind of casque, and the whole plumage is black or dark gray, speckled with white spots. It has wattles from the bill, which do not proceed from the lower chaps, as in common cocks, but from the upper, which

gives it a very peculiar air, while its restless gait, and odd, chuckling sound, distinguish it sufficiently from all other birds. They are natives of Africa, and consist of several varieties. Among the common sort, we sometimes find a white and pied variety, produced by domestication. It is rather pugnacious, and unpleasant in a poultry-yard. There is a difficulty in distinguishing the cock from the hen. The wattles of the cock are of a more intense red than those of the hen, and stand out more from the beak; the wattles of the hen are darker in colour, and more pendulous. There is likewise a difference in their voice and call—the hen only using the call-note, "Come back! come back!" They are an excellent substitute for game, in the spring season, and are better of being kept for some days before dressing. Notwithstanding their long domestication, they retain some of their original wildness, and stray at a distance, to drop their eggs, which are smaller than those of a common hen, and very abundant. The common hen will be found an advantageous nurse for their chicks, as not possessing the wandering propensity of their true parent. The eggs require thirty days' hatching; the chicks are very tender, and should not be brought out too early in the spring, lest the inclement season destroy them. I would recommend the same food for them as for turkey chicks.

In many parts of their native country they are seen in vast flocks together, feeding their young, and leading them in quest of food. All their habits are like those of the poultry kind. Their eggs, like their bodies, are speckled. An experiment has been tried to naturalize them, on our Dublin mountains, which proved successful for a time, being able to procure abundance of food during the summer season, but they were found unable to sustain themselves during our winter months, and entirely disappeared.

THE CRESTED GUINEA FOWL

Is not so large as the common species: the head and neck are bare; of a dull blue, shaded with red upon the head; and instead of the casque, it has an ample crest of hairy-like, disunited feathers, of a bluish-black, reaching as far forward as the nostrils, but in general turned backwards. The whole plumage, except the quills, is a bluish black, covered with small, grayish spots, sometimes four, sometimes six on each feather. The quills are pale yellowish brown, and the edges of the secondaries pure white, appearing very conspicuous, from the contrast with the

other parts. It inhabits the Great Namaguas country, and has the same manners as its congeners.

There is another species found in Madagascar, which is very closely allied to the common bird, differing chiefly in the general colour of the plumage, being darker, and in the spots being larger.

THE RING-NECKED PHEASANT

Is but a variety of the common pheasant. It would be difficult to find a preserve of any extent in England or Ireland, in which the common brown, and the ring-necked pheasant are not jointly to be had, or, perhaps, an intermediate race between them. Some authors describe the ring-necked bird as being less than the common brown bird, a doctrine which I cannot subscribe to, having kept and bred both. I should rather say, the ring-necked was the larger of the two; however, if they differ in size, it is very trifling, indeed. The cock should weigh near 3 lbs. Into most preserves, has latterly been introduced, a white and a pied variety, both very beautiful, and quite as easily reared as the common, or, indeed, I should rather say, more so, which, perhaps, arises from their having been tame bred, and appearing more domestic than the coloured birds. The upper part of the head of the ring-necked pheasant is tawny, with a gloss of green. Two white dashes surmount the eyes, and the rest of the head and neck are of a deep and brilliant green, with a violet reflection, except where the white collar, that gives name to the species, passes round the neck. The feathers of the back are black, in the middle, surrounded by a zig-zag whitish band, and tipped by a black, arrow-shaped spot; those of the shoulders are black at the base, marked in the centre by a whitish pupil, surrounded by a black ring and chesnut, with somewhat of a purple gloss towards their tips. The tail coverts are light green, with loose, silky barbs; the breast is of a brilliant reddish purple; the sides pale yellow; the under parts of the thighs black, with a gloss of violet; and the tail feathers olive green in the middle, with broad, black, transverse bands, and of about sixteen inches long. They are furnished with black spurs, shorter than those of the common poultry. In the female, there is a narrow band of short, black feathers beneath each eye, which distinguishes her from the common hen pheasant, from which she differs, besides, in the want of the black spots upon the breast, and the greater intensity of the transverse black bars upon her tail. The

THE RING-NECKED PHEASANT.

eggs, too, differ, in being of a light blue, with a tinge of green and marked by numerous little spots of a deeper hue, while those of the common pheasant are of an olive white, and without any spots. They are, as with all the other pheasants, which we have

bred, natives of China, introduced into Europe, from the banks of the Phasis, a river in Chalchis, now the Rioni, in Asia Minor.

We are told that when Crœsus, King of Lydia, was seated on his throne, adorned with royal magnificence, and all the barbarous pomp of eastern splendour, he asked Solon had he ever beheld anything so fine! The Greek philosopher, noway moved by the objects before him, or taking a pride in his native simplicity, replied, that, after having seen the beautiful plumage of the pheasant, he could be astonished at no other finery; and Heliogobalus, in his ostentation, is said to have fed the lions of his menagerie with them.

The pheasant is not only beautiful to the eye, but most delicate when served to the table. Its flesh is considered the greatest dainty. When the old physicians spoke of the wholesomeness of any viands, they made their comparison with the flesh of the pheasant. No matter with what care they have been bred or propagated, they disdain the protection of man, and shelter in the thickest covers and remotest forests. All others of the domestic fowl submit to the protection of man, but the pheasant never has, preferring the scanty produce of acorns and berries to the abundant supply of a farm-yard. The hen pheasant, in a wild state, hatches and brings up her brood with patience, vigilance, and courage, but when kept tame, she never sits well. A substitute must be found in the clean-legged bantam, the larger fowl being too heavy for the chicks. Her time of laying is about the middle of April, and if in an aviary, the eggs should be immediately removed, and placed in dry bran or chaff, until you wish to set them. They are about twenty-four days coming out. After the young ones appear, they are not to be fed for twenty-four hours, after which give them hard-boiled egg, chopped fine, and mixed with oatmeal, ant-mould, cheese, curd, lettuce cut fine, white flour wetted with sweet milk, bread crumbs, bread and milk, with very limited drink. Be particular to preserve them from cold and moisture. You will have to confine the hen, so as to prevent her eating their food; and you will have to provide them with maggots. In the neighbourhood of Paris, where they rear quantities of young fowl, for the market, they prepare what they call a *vermineer*, by digging a hole in a dry, sandy spot, in which they place a piece of flesh, which soon gets into maggots, with which they feed the young birds. My own *vermineer* is of much simpler and economic construction. I have an earthen pan, about two feet deep, and one foot diameter, into which I put some bran; on this I place a piece of liver or carrion. I

cover it with a common glass cap, and place it in the sun. The flesh soon gets fly-blown, and speedily creates quantities of maggots, and with a long-handled spoon, I have them thrown to the young birds. They should not get more than one feed of those in the day. The more varied their food, and the more frequently renewed, the better. Fresh and fresh, and a little at a time. The green leaves of barley are excellent. At three months old, feed them on barley, with a little wheat, boiled carrots, or potatoes, mixed with bread crumbs. Give a small portion of boiled rice during the moult. If they should get the roup, give them fresh curd every day. To make alum curd, take new milk, as much as your young birds require, and boil it with a lump of alum, so as not to make the curd hard and tough, but custard-like. A little of this curd and ant's eggs, should be given to them twice a day, in addition to their other food. Keep their vessels clean; and if the disease still continue, give them, every second day, a small dose of garlic in a little fresh butter. They are subject to be vent-bound, which, if not attended to, will kill them. The remedy is, with a sharp scissors cut close the down or feathers about the vent, and anoint it with sweet oil, and be attentive that it be kept clean, otherwise you cannot rear them; but in handling them, be particularly cautious that you do it with the greatest delicacy, as the least rough handling will kill them. If they have a scouring, the alum curd will check it.

There is no difficulty in breeding the common pheasant in a wild state; but to keep them in an aviary, you will have to get a wire trellis in front, sufficiently close to prevent the sparrows and other birds robbing them of their food. The saving of the food, will very soon compensate you, for the wire-work, and insure your pheasants being fed. At the top, I would prefer close net-work, of moderate-sized cord, well painted. The reason is, if the birds get fluttered, they fly straight up, and by a dash against a hard substance, they frequently fall dead, but by coming in contact with the net, they receive no injury. Part of the aviary should be sheded, to protect them from the inclemency of the weather; and I would recommend a retiring-place for the hen to lay in, and perches of about one inch diameter. I would advise the retiring-place to be laid down with clean straw, but would prefer fine sand for their walking-place. Wheat and barley are their best food, with occasionally vegetable matter, lettuce, turnip-tops, cabbages, &c. One cock is sufficient for three or four hens.

The pheasant may be said to have been originally restricted to

the Asiatic Continent, extending over the greater part of it, and reaching to China and the confines of Tartary. Now, however, it is much more extended, and its facility of domestication and hardy constitution suit it for almost every country. It is abundant even in Siberia, where the inhabitants adorn their caps with its plume; and one of the governors of St. Helena succeeded in almost naturalizing it to the more barren soil of that island. In the greater part of Europe, it is completely naturalized; and we have heard of its introduction to North America, where it will certainly thrive. Doctor Gilgeous, who so long resided amongst us, and made natural history a study, has introduced the brown, the golden, and the silver pheasants, into Demerara: we have not yet learned with what success. We are not aware of any similar attempt having been made, either in Africa or New Holland. In the latter climate we should have little doubt of its succeeding, but the climate of Africa we should consider as one of the most unpropitious for its establishment; we are in greater uncertainty of the time of its introduction into Great Britain than of its original discovery. They are mentioned in Echard's History of England, as worth only 4d., in 1299. Two hundred made part of the great feast of Archbishop Neville, about the middle of 1400; and in the regulations of the fifth Earl of Northumberland, begun in 1512, we find their value increased to 16½d. each. Upon the Scottish border, and high Cheviot range, they must have been early abundant. The common pheasant does not much differ in its markings from those of the mixed breed we are accustomed to see, except in the entire want of the ring, and the peculiar tint upon the head and rump; but it is longer, by five or six inches, than the other, extending to three feet. Of the habits of these birds, in a natural state, we know little in reality, but have no reason to doubt their similarity to those exhibited in our own country; and the deep, matted jungles of India, particularly where water abounds, must be their favourite resort. In their naturalized state, woods, with a thick undergrowth of brush, brambles, long grass, &c., and interspersed with open glades, which some little stream refreshes, and the sun enlivens, are their delight during the day, whence they run, morning and evening, to the open skirts, where some favourite food abounds. It is in their way to such feeding ground that they are so easily secured by unqualified persons; for, never taking flight unless when disturbed, they run and tread their way through these tangled brakes, and leave passages which are easily distinguished by the practised eye of the poacher. During the winter months, the

pheasant goes regularly to roost, and the abundance of a preserve may easily be ascertained about twilight, by the noise which the males make in flying up to their perch. During summer, however, and when moulting, they do not tree, but squat among the long grass and cover, offering themselves, in this way, an easy prey to another class of enemies, polecats, foxes, &c. When pheasants are numerous, Mr. Selby observes, "The males are, in general, found associated during the winter, and separate from the females; and it is not until the end of March that they allow the approach of the latter, without exhibiting signs of displeasure, or, at least, of indifference. At the above-mentioned time, the male assumes an altered appearance. The scarlet of his cheeks and around his eyes, acquires additional depth of colour, his ears become erect, and he walks with a more measured step, with his wings let down, and his tail carried in a more raised position. Being polygamous, he now takes possession of a certain beat, from whence he drives every male intruder, and commences his crowing, attended with a peculiar clapping of the wings, which answers as the note of invitation to the other sex, as well as of defiance to his own." During summer, the favourite food of the pheasants are tender shoots of the potato and other plants, and insects, with their larvæ. As the autumn advances, the ripening grains of all kinds are abundant, and the ample store of wild fruits and berries, which nature has everywhere provided, renders this their time of feasting. As winter approaches, they are reduced to less various fare, and resort to the fallows in search of roots, and to turnip fields; and Mr. Selby has remarked, that the roots of the bulbous crowfoot (Ranunculus bulbosus), and of the garden tulip, are both much sought after. The latter they omit no opportunity of obtaining, and which, by means of the bill and feet, they are almost certain to reach, however deep it may be buried. In extensive preserves, during this season, they are always regularly fed, and know the feeding hour and call of the keeper correctly, and by this means they are prevented from straying. The most successful and favourite food at these times is seeds and grain. They are particularly partial to the Jerusalem artichoke, and most dexterous in pecking it out of the earth. This root and buckwheat constitute their most favourite and wholesome food, for the winter season; and in the most successful preserves, both are propagated in patches, in any open space near the cover. The month of May is the time to sow the wheat, or propagate the artichoke, both of which is easily done, by breaking up the sod, and laying down the bulbs for the one, or

sowing the seed for the other; and so enticing is this food, that they will not desert the cover to which it is annexed. If the winter supply is abundant, the birds are sure to be most prolific in the following spring and summer.

In the south of England, and latterly in Ireland, the breeding of pheasants is carried on to a great extent, and, on this account the bird can almost never be seen, except in an artificial state; for, being turned out of the nursing-houses early in the season, and fed and nursed in the covers for the winter's batteau, they are sluggish and lazy, quite fearless, and can afford anything but sport, to one accustomed to follow game in their wild and natural haunts. The slaughter at these shooting meetings is sometimes so immense, that the game can scarcely be made use of; and they were formerly much more wanton on the Continent than in England. In, perhaps, the largest game establishment of modern days, and conducted in a most magnificent scale—that of Chantilli—54,878 head of various game were killed, in one year; and, during a period of thirty-two years, 12,304 is the lowest number that was obtained. In the same course of years, the number of pheasants killed, was 86,193, averaging nearly 2,700 yearly. In Germany, there were some parties scarcely inferior in massacre. A party of ten, in Bohemia, are said to have killed, in two days, within a limited extent, above 950 pheasants, besides about 1,200 partridges; and, in another part of Germany, twelve sportsmen, if such a name is applicable to them, killed in one day, of fourteen hours, 39,000 head of game, of which pheasants bore a proportion. At the Christmas batteau, in England, from 800 to 1,000 head of game is a frequent daily amount, the greater share of which, are hares and pheasants. From these some idea may be formed of the extent to which breeding and turning out is carried.

The pheasant is subject to a considerable variety of plumage. Like most gallinaceous birds, at an advanced age, the female sometimes assumes the plumage of the male, and those in this state should be killed, or expelled the preserves, as, with this livery, they assume a disposition to war with their own race. They vary, in being mottled with white, or becoming entirely of that colour, and Temminck is of opinion that, in such cases, it is owing to disease in some of their functions, and mentions that persons who have long had the charge of a pheasantry, have known the white birds resume all their former brilliancy, after continuing for years in the albino state.

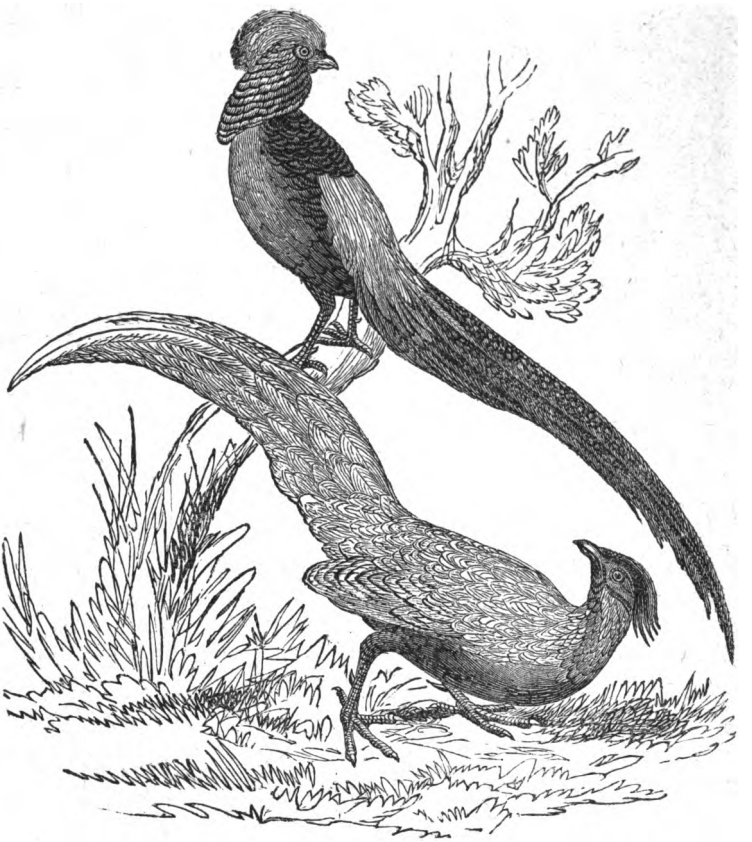
There is another very beautiful variety, which, of late years, has become extremely common in Scotland, and has received the name

of Bohemian pheasants. The ground shade of the plumage becomes of a rich, green, cream colour, but the head retains its glossy tint, and the black tips and markings on the breast, belly, and back, appear even more conspicuous than in the ordinary sort. This state may occur from a modification of the same causes which influence the change in the white varieties.

It is not unusual to have the pheasants crossed on the domestic fowl; I have heard of their being again reproductive, but have, myself, no knowledge of the fact. I have been fortunate in breeding hybrids, but have never had them to reproduce. I have likewise, bred a cross from a common, pied cock, and a golden hen; the male bird was of brilliant plumage, but not so much so as the gold bird, and was not quite so large as the common bird, but most pugnacious. The Earl of Derby had the male bird from me, and said, although he previously had them, he thought there was then no other in existence. Although the female of the same clutch was never out of my aviary, she was so wild, that she killed herself against the roof.

THE GOLDEN AND SILVER PHEASANTS,

Being so frequently the inmates of our aviaries, require particular notice: the golden pheasant, at the top of the print, is not so large as the common pheasant, but the most beautiful of the entire tribe. The male bird, when in perfect plumage, measures nearly three feet in length, of which the tail alone forms about two-thirds. The feathers of the fore part of the head are very long, silky, and of a bright yellow, and considerably overhang those of the hinder part, which are of a brilliant orange, marked with transverse, black rays; these last are elongated and extended backwards over the sides of the neck, and may be raised or depressed at will. The cheeks are thinly clothed with minute, velvet feathers, and the rest of the head, as well as the entire throat, is covered with plumage, the former being destitute of the comb, so conspicuous in the common fowl. The feathers of the back of the neck are tinged with a mixture of green and gold, and bordered with black; those of the back and upper tail coverts are bright yellow, the latter terminating in a crimson border. Over the base of each wing, is a broad patch of deep blue, passing almost into violet; the wing coverts and secondary quill feathers offer various shades of chesnut and brown, and the primary quill feathers are marked with reddish spots, upon a brown ground. The tail feathers are variegated with chesnut and black, the colours being dispersed in oblique rays upon the latent



THE GOLDEN AND SILVER PHEASANTS.

quills. Immediately above the base of the tail, the feathers are a beautiful scarlet. The throat is of a dusky brown, and all the rest of the under surface, including the neck, the breast, and the abdomen, is of a bright scarlet. The iris is a bright yellow, as are also the bill and legs, but with a somewhat lighter tinge; the latter are

furnished with moderate-sized, conical spurs; the feet are divided into four toes, the three anterior of which are united at the base, by a short, membranous expansion. The tail is long, narrow, and arched, composed of eighteen feathers, forming two vertical planes, and overlapping each other, in regular gradation, the two middle ones being considerably longer than the rest.

In the female, as is usual in this tribe of birds, the colours are infinitely less splendid than those of the male. The upper parts are of a rusty-brown, varying in intensity; the under surface is marked with spots of a deep brown, on a lighter ground; the throat is nearly white; the wings are transversely barred with black; and the tail, which is considerably shorter than that of the male, is variegated like the wings. They are natives of China, inhabiting the same localities as the common pheasant, but are an entirely distinct species, and never known to cross in a wild state. As before mentioned, I had them to breed together, in my aviary, but the circumstance is very unusual, and they have never been known to reproduce. They are called by the Chinese *kinki* or *kinkee*, gold-flower fowl, or wrought fowl. They are not so wild in their habits as the common pheasant, and have been attempted to be set at large, in preserves, but generally without success. For the table, they are said to be more delicate than the common pheasant; their numbers are, however, too limited to be often seen in a cooked state. The feathers of the crest and ruff are held in much request by anglers, and particularly to assist in dressing the gaudy, Irish hooks.

I have found, from experience, that the golden pheasant is not the delicate bird described by some authors, having kept it in an open aviary, at all seasons, and found it to be an earlier layer than the silver or the common bird, and, consequently, not affected by the inclemency of our winters; and, with proper treatment, more easily bred in confinement, than the common pheasant. I would recommend the same treatment as to breeding, rearing, and general management, as that laid down for the common pheasant, for which see pages 78 and 79.

THE SILVER PHEASANT,

Which accompanies the golden pheasant, in the foregoing print, is a larger, and a more robust bird than either the golden or the common pheasant, and more docile than either; it is a bold bird, and easily reduced to domestication. The male bird is about two feet eight inches long; its cheeks are clothed with an apparently

naked skin, of a bright vermillion tint, advancing forwards above the eyes, so as to form a kind of crest, and terminating in a pendulous fold on each side of the lower mandible. The top of the head is ornamented by a tuft of long, black feathers, which fall down over the upper part of the back of the neck. On the sides of the head and neck, the entire surface of the back and wings, and the upper part of the tail, the plumage is of a bright, silvery white, transversed with the greatest regularity, by an infinite number of finely-pencilled black lines, passing obliquely in the form of chevrons, across the feathers, from which it is called the pencilled pheasant. A striking contrast to this delicacy of tint is afforded by the uniform, purplish black, of the fore part of the neck, breast, and under surface of the body. The two long tail feathers are perfectly white in their extreme half; the iris is of a brownish orange; the bill yellowish, but becoming dusky towards the point; the legs deep red; the spurs long, sharp, and white. In the female, the red of the cheeks is much less extensive; the top of the head has a kind of crest, of a dusky brown; the neck, breast, and upper surface, are of an earthy brown, the lower of a dingy white, with a mixture of brown, and crossed with blackish bands; the quill feathers are nearly black, and the tail variegated with black, white, and brown.

This elegant species inhabits the north of China, where it is frequently kept in a tame state, whence it has been imported into Europe. It thrives even better, in domestication, than the common pheasant, and is easily bred, and may be readily propagated in the open country, which has already been successfully attempted; but they will not suffer the approach of the common pheasant, into any preserve in which they are kept.

All the pheasants, when in a growing state, are subject to attacks of illness, mostly originating from too damp an atmosphere, too violent a circulation of cold wind, or the want of insectivorous matter, with which nature provides them, in a wild state. The next frequent attack, is that of the gapes, occasioned by an intestinal worm, which, lodging in the windpipe (*trachea*), causes death by suffocation. Garlic is sometimes given with advantage, and may be made a strong infusion in the drink of the birds; or a clove cut and put down their throat; and chives or young onions chopped small, and mixed with meal, may be given very beneficially, once or twice a day, as their food, in the early stage of the distemper, and before the violent irritation of the vermes has caused inflammation. Fumigation is recommended in an advanced state of the disorder; the inhaling of the smoke

of tobacco stands foremost as the readiest, being so easily applied in the form of fumigation, and, if properly applied, is said to be an infallible remedy. In order to administer it with success, you must be careful that the chicks be not suffocated. The operation has been performed with the utmost success, by covering the diseased chicks in a box: to a person in the habit of smoking tobacco, there is no difficulty in lighting a pipe, and by introducing the bowl through an aperture, the smoke may be blown in till it appears sufficiently dense, which must be examined every two or three minutes. When any of the chickens become stupified, by the fumes of the tobacco, the operation of blowing the pipe should cease, when there will be no danger of suffocation; but if they appear exhausted, they should be taken out; and will speedily recover. As dense a smoke as the chickens can exist in, is best, and the criterion is stupefaction, and the loss of their legs; as soon as that appears, no more smoke should be introduced. You are to recollect, that inhaling a large quantity of smoke, in a short time, is more effectual than a small quantity inhaled for several hours.

I have tried a moderate solution of tobacco in water, with success. It seems to have precisely the same effect on the chicks as fumigation; and, although it does not pass down the *trachea* or windpipe, still the exhalation communicates with the *vermes*, and seemes to have all the advantages of fumigation, without the risk of suffocation; and it is said, that so powerful is the effect of tobacco, that no culinary preparation can render the flesh of the fowl palatable, that dies under this operation.

Jalap has been successfully given as a purgative to fowl that have been moping, and dispirited—five grains to a young chicken; ten grains to a half-grown fowl; and fifteen grains to an adult.

The above remedies are applicable to the entire poultry tribe.

THE WHOLE PHEASANT TRIBE

Are so beautiful, it would be difficult to say which is most so. One noticed by M. Diard is of the size of the Common Pheasant, gorgeously adorned with green and gold; in shape, it much resembles the common bird, but of more splendid plumage.

The *Phasianus superbus*, of Latham, is, perhaps, the most splendid of the tribe; it is very rare in China, where it is kept in the menageries of the most wealthy. It has an extraordinary long tail. Temminck gives the length of the longest feathers as

above four feet; the body about the size of the silver pheasant, and the whole plumage beautifully barred.

SŒMMERING'S PHEASANT is a very beautiful species, sent to the Dutch collection, by Dr. Seiboldt, from Japan. It is described as intermediate in size between the Common and Golden Pheasant. The male is a rich, reddish purple.

The ARGUS PHEASANT, a superb bird, of chaste tints and harmonious blending, but not of the brilliant splendour of the preceding. It is an inhabitant of Sumatra and Malacca. The body is about the size of the Silver Pheasant, but with its two long, tail feathers, which are of themselves three feet eight inches, its entire length is five feet three inches. The wings, of which the secondaries are three times the length of the quills, being about two feet ten inches long, from their unwieldy size, almost entirely deprive the bird of flight, but greatly accelerate its pace when running. Upon the wings, and particularly upon the secondaries, is lavished the greater part of the beautiful adornment of the many eyes, from which the bird takes its name. When at rest, or not excited, those beautiful spots are hardly visible, but when in the presence of his females, the wings are expanded and trailed upon the ground, displaying their beauties, as the peacock exhibits his train, or the turkey his tail. I have, fortunately, been in the possession of stuffed specimens of both male and female, the female being much smaller than her mate, and, as in all the Pheasants, of plain and modest plumage. Mr. Cross, while proprietor of the Surrey Zoological Gardens, was then in possession of a living male specimen, which has since been added to the great Knowsley collection, in both of which aviaries I had the good fortune to see it, and believe it to be the only living specimen at present in Great Britain.

THE IMPEYAN PHEASANT

Inhabits the Alpine ranges of Nepaul and Himalaya, and were first attempted to be brought to Britain by Lady Impey, but without success, having died on shipboard. Fine specimens have since been added to the collection of the Earl of Derby, with whom they have bred; and Sir Philip Crampton, our Surgeon-General, has lately been presented with a beautiful living pair, by Lord Hardinge; the male bird, unfortunately, died, since which the female has been sent to the London Zoological Gardens, to seek a mate, that society being in possession of a male bird, and with every prospect of an increase, the female having laid

before being removed from Sir Philip's residence. Those are thought to be the only living specimens in Great Britain.

The splendour and changeability of the tints upon the male of this bird, is almost impossible to describe, either by words or the pencil. The greater proportion of the plumage, is of varying hues of green, steel-blue, violet, and golden bronze. Upon the head, there is a crest of feathers, composed of a naked shaft, with an oval tip, of a similar texture with the rest of the plumage, which is capable of erection. The centre of the back is pure white, the tail is plain, rounded, and of a bright chesnut; the legs are armed with strong spurs. The female is smaller than the male; the feathers of the head lengthening behind; the throat, and fore part of the neck pure white; the rest of the plumage is of a pleasing reddish brown, varied and mottled by spots and bars. There is no trace whatever of the resplendent colours of the male. The claws and beak are well adapted to scratching up bulbous roots and insects, of which they are particularly fond.

The success of the Earl of Derby in breeding these pheasants, gives hopes of their becoming a valuable addition to our game birds, or a splendid ornament to our aviaries.

To go more fully into the Pheasants, which are both numerous and beautiful, would exceed the boundaries of our space.

Some splendid skins of the magnificent Pheasants of China, the Himalayan range, and Sumatra, have recently arrived in Dublin, and have been beautifully put up by the celebrated taxidermist and mineralogist, Mr. Glennon, of Suffolk-street.

Pheasant shooting commences on the first day of October, and ends on the first day of February.

Having commenced with the Pheasant, and intending to give a series of British and Irish game birds, although the early game is now comparatively scarce, I cannot omit a description of the Bustard, the Heron, and the Bittern, in compliment to our ancestors, which, in the palmy days of falconry, were considered the very head and front of the game birds of Europe, and shall then proceed to describe those with which our modern sportsmen are more familiar, and the localities where they may be expected to be most abundant.

CHAPTER VI.

GAME BIRDS.

"What arms to use, or nets to frame,
Wild birds to combat, or to tame,
With all the myst'ries of the *game*."

THE GREAT BUSTARD.

I regret that we cannot claim this noble bird as a native, there being no record of its having been shot in Ireland. It is the largest of the British game birds, sometimes weighing thirty pounds, and is about four feet long. It approaches to the galinaceous tribe, and has points resembling the ostrich and cassowary.

Its bill is strong, and rather convex; its eyes red; on each side of the lower mandible of the male bird, there is a tuft of feathers, about nine inches long; its head and neck are ash-coloured; the back is barred transversely with black and bright rust colours, on a pale, reddish ground; the quills are black, the belly white; the tail consists of twenty feathers; the middle ones are rust-colour, barred with black; those on each side are white, with a bar or two of black near the ends; the legs are long, naked above the knees, and dusky; it has no hind toe; its nails are short, strong, and convex; the bottom of the foot is furnished with a callous prominence, which serves instead of a heel. The female is not much more than half the size of the male. The top of her head is of a deep orange; the rest of her head brown; her colours are not so bright as those of the male, and she has no tuft on each side of the head. There is likewise another very essential difference between the male and female; the former is furnished with a sack or pouch, situated in the fore part of the neck, and capable of containing about two quarts; the entrance to it is immediately under the tongue. It is supposed the bird fills this singular reservoir with water, which it conveys over those dreary plains, where it is accustomed to wander, and uses it for the supply of the hen while sitting, or the young birds before they can fly. It likewise makes a further use of it, in defending itself against the attacks of birds of prey. On such occasions it throws out the water with such violence as not unfrequently to baffle the pursuit of its enemy.

This bird was once more numerous than at present, but the increased cultivation of the country, and the extreme delicacy of its flesh, have greatly thinned the species. Indeed, it would probably have been long since exterminated, but for its peculiar manner of feeding. Had it been accustomed to seek shelter among our woods, it must have been destroyed in proportion as they were cut down; if in the forest, the fowler might have approached it unobserved, and the bird, from its magnitude, would have afforded such an excellent mark, that it could not easily have been missed. But the bustard now inhabits only the open and extensive plains, where it is plentifully supplied with food, and where every invader of its repose may be seen at a considerable distance. The bustard is mentioned as affording what is termed the "great flight," together with the crane, wild goose, bittern, heron, &c. In winter, they associate in flocks, and visit turnip fields, for the sake of the leaves, to which they are very partial. The eggs are two in number; the female forms no

definite nest, but deposits them on the ground, in a small depression made to receive them. They exceed in size those of the turkey, are of a pale, brownish olive, with darker blotches. If the eggs should be handled, or even breathed upon, she immediately abandons them. Incubation lasts four weeks, and the young, as soon as excluded, follow their parents, but are unable to take wing for a considerable period.

Bustards were formerly more common in England than at present; they are now found only in the open counties of the south and east, in the plains of Wiltshire, Dorsetshire, and in the open plains of Yorkshire. They were formerly met with in Scotland, but are now supposed to be extinct there. They are slow in taking wing, but run with great rapidity, and, when young, are sometimes taken with greyhounds. Their chase is said to afford excellent diversion. The bustard is graniverous, but feeds chiefly on herbs. It is also fond of those worms which are seen to come out of the ground, in great numbers, before sunrise in the summer; in the winter, it frequently feeds on the bark of trees. Like the ostrich, it swallows stones, bits of metal, and the like.

Bustards are found in various parts of Europe, Asia, and Africa, but have not hitherto been discovered on the new Continent. In Spain, and in the plains of Greece, in some parts of Russia, and on the wilds of Tartary, also in Germany, it is common. It is occasionally seen in some parts of France; very rarely in Italy.

Bustard shooting commences the first of September, and concludes on the first of March. The mere possession of these birds at any other period of the year (except such as may be kept tame), subjects the party (13 Geo. III., c. 55) to a penalty of not more than £20, nor less than £10, for the first offence, and for every subsequent offence, to not more than £30, nor less than £20, half to go to the informer, and the other half to the poor of the parish; and in case where neither penalty nor distress can be had, to imprisonment, of not less than three, nor more than six months.

THE LESSER BUSTARD, being so rarely shot in England, can scarcely come under the head of British game birds. I shall, therefore, only remark, that it much resembles the Great Bustard, described above, but is not quite so large as the common pheasant.

A fine specimen of this rare bird, the Little Bustard, has been lately shot on the commons of the Long-hill, adjoining the Powerscourt estates, in the County Wicklow, about 2,000 feet above the

level of the sea, by James Reside, Esq., now of Island-bridge, and College-green, Dublin; it was congregated with a number of gray plover, and had a companion of its own species; it was presented to Henry B. Haffield, Esq., R.C.S., being killed near his lodge, on Douce Mountain, and preserved by Mr. Glennon, of Suffolk-street. Another has been shot by Edward W. Winder, Esq., at Sandymount-marsh, County Dublin.

The Earl of Derby has some living specimens of both these birds, in splendid plumage and health, in his superb aviary at Knowsley.

HERON HAWKING

Was once the favourite sport of our ancestors, who enacted laws for the preservation of the species, and the person who destroyed their eggs was liable to a penalty of twenty shillings for each offence. At that time it was a favourite dish with the nobility and gentry, and as much esteemed as the pheasant or the peacock. In the twenty-seventh year of his reign, Henry VIII. issued a proclamation, in order to preserve the partridges, pheasants, and herons, "from his palace in Westminster to St. Giles's-in-the-Fields, and from thence to Islington, Highgate, and Hornsey Park." Any person, of whatsoever rank, who should presume to kill or in anywise molest these birds, was to be thrown into prison, and visited by such other punishments as should seem meet, to his highness the king.

It is worthy of remark, that Henry VIII. removed the royal hawks (which had been kept there during many reigns) from the Mews, at Charing-cross, and converted that place into stables. According to Stow, the King of England's falcons were kept at the Mews, in Charing-cross, as early as 1377, or the time of the unhappy Richard II. The term "Mews," in falconer's language, meant strictly a place where hawks were put at the moulting season, and where they cast their feathers. The name, confirmed by the usage of so long a period, remained to the building at Charing-cross, though Henry VIII. had so changed its destination as to make it inapplicable. But what, however, is much more curious, is this, that when, in more modern times, the people of London began to build ranges of stabling at the back of the streets and houses, they called those places "Mews," after the old stabling at Charing-cross, which, as you see, was misnamed.

The most favourite hawk, for hunting, is the peregrine falcon. Ireland has been celebrated over the world, for her hawks and wolf-

HERON HAWKING.

dogs: Roderick, king of Connaught, was obliged to furnish hawks and greyhounds to Henry II. Henry VIII. presented the Marquis Dessarages, a Spanish grandee, with two Irish hawks and four Irish greyhounds, or wolf-dogs.

The late lamented Duke of St. Albans, who has so recently died, held the appointment of hereditary grand falconer, at a salary of £1,200 a year. His ancestor, the first Duke of St. Albans, was son of Charles II., by the beautiful Nell Gwynne, of theatrical notoriety: his title was conferred in 1684. He has made several recent attempts to revive the ancient sport of hawking, in his character of grand hereditary falconer of England, on his own estates; and he has also, during the time he took up his residence at Brighton, given the inhabitants of that fashionable watering-place, some splendid displays, of the above sport, upon the neighbouring Downs, attended by the Duchess of St. Albans, the Ladies Beauclerc, and accompanied by several persons of distinction. Some of his best hawks were imported from Germany. The females are always preferred, being larger and more courageous than the males.

The appearance of the Duke, in the splendid dress of his office, and his attendants, all apparelled in the costume attached to falconry, proved highly attractive to the spectators; in truth, there was a theatrical nicety about it altogether.

Our respected fellow-citizen, Yelverton O'Keefe, Esq., has lately gratified a numerous assemblage of nobility and gentry, by several flights of his beautiful peregrine falcons, which, for killing and training, could not be excelled. Mr. Robert Montgomery has since flown some of them, with much success, in the neighbourhood of Dublin.

A very interesting exhibition of hawking, took place in the neighbourhood of Amesbury, and was witnessed by a numerous field of sporting gentlemen and others, attracted by curiosity. The hawks, six in number, were remarkably fine young birds, and their proprietor, Colonel Thornhill, directed the sport of the day, in the presence of Sir Hussey Vivyan, Sir Francis Burdett, Mr. Mills, and numerous other gentlemen, who were invited, on the occasion. The scene of action was an extensive field of turnips, in which it was known that there were partridges, in sufficient number for the purpose, and the ground was graced by several carriages containing ladies. The hawks were brought to the field by the colonel's falconer and assistant, perching, hooded upon a frame. The sportsmen and spectators were ranged on the outside of the field; a fine bird was then taken from the perch, by the falconer, unhooded, and permitted to fly. The hawk immediately lowered,

and towered over the field, with his eyes intensely bent towards the turnip plants, in search of prey. He went over the ground, with evolutions similar to those of a pointer, upon the ground. After a few minutes had elapsed, Colonel Thornhill ordered some boys to enter the field, for the purpose of disturbing the birds, and a partridge at length arose, which was instantaneously seen by the hawk, though at a great distance. The hawk darted after it, and struck it to the earth; but the partridge recovering, flew, as it were, for protection, amongst the spectators; here it was pursued by the relentless hawk, and killed. The other hawks were afterwards severally let loose, and all but one of them killed a partridge each. Some of the latter were pursued and killed out of sight of the spectators; and it is highly worthy of remark, that the hawks had been so well trained, that they invariably returned to the falconer, at his call; and when out of sight and hearing, he attracted them by throwing, into the air, a lure, something resembling a stuffed partridge.

This diversion was, among the ancient English, the pride of the rich, and the privilege of the poor. We learn, from the book of St. Alban's, that every degree had its peculiar hawk, from the emperor down. The Norwegian breed, the gyr-falcon, is the largest and most powerful of the hunting hawks, and was in high esteem in England; they were thought bribes worthy a king. Geoffry Fitzpierse gave two good Norman hawks to King John, to obtain for his friend, Walter Le Madeno, the liberty of exporting one cwt. of cheese; and Nicholas, the Dane, was to give the king a hawk every time he came to England, that he might have free liberty to traffic throughout the king's dominions. They were also made the tenures by which some nobles held their estates from the crown.

In a lecture by the late Sir Charles Giesecke, professor of mineralogy and natural history, delivered in the theatre of the Royal Dublin Society, he mentioned having been present at a hawking match in Norway, where the powerful gyr-falcon was flown at a hare, the bird seized the hare by the back, with one claw, and with the other the stump of a tree, and with so great a grasp, that the hare, in endeavouring to escape, actually removed one of the legs of the falcon from its socket, which caused the immediate death of the bird. It was torn to pieces, not being able to extricate its claws.

Hawking was performed on horseback, and on foot: on horseback when in the field and open country, on foot when in the woods and coverts. Those on foot carried a stout pole to assist in leaping over rivulets and ditches. We learn from Hall, that Henry

VIII., pursuing his hawk, on foot at Hitchen, in Hertfordshire, attempted, with the assistance of his pole, to jump over a ditch, that was half full of muddy water; the pole broke, and the king fell with his head into the mud, where he would have been stifled, had not a footman, who was near him, leaped into the ditch, and released his Majesty from his perilous situation.

Hentzner, who wrote his Itinerary, A.D. 1598, assures us that hawking was the general sport of the English nobility. At the commencement of the seventeenth century, it seems to have been in the zenith of its glory. It was considered the head of rural amusements, and hawks the ensigns of nobility. Ladies of distinction were represented with hawks on their hands; a gentleman was known by his hawk, his horse, and his greyhound.

Sir John Sebright, of whom I have had so often to speak, has recently published a work on hawking, which details the best method of taking, rearing, and training the hunting hawks, with all the terms of falconry, including feeding, tiring, &c.

THE COMMON HERON was the favourite quarry of the falconer, and protected by laws enacted for its preservation, it being a fine of ten shillings for taking the young out of the nest, and six shillings and eightpence without his own grounds, killing a heron, except by hawking or by the long bow; while in subsequent enactments, the latter penalty was increased to twenty shillings or three months' imprisonment.

The heron's beak is six inches long, straight, compressed, and sharp, with a delicate cere at the base, and the upper mandible solcated, of a yellowish, horn colour, irides yellow, lores naked, legs long, naked, high above the tarsel joint: wings ample and rounded; middle claw pectinated. The common heron is spread over the greater part of the world, inhabiting Asia and Africa, as well as Europe. In our island, and in temperate climes, the heron is stationary, but is migratory in colder latitudes. Except during the breeding season, this fine bird is solitary, hunting rivers, sheets of water, and preserves of fish, where it often commits considerable damage. It is early in the morning, with the gray of the dawn, after sunset in the evening, and especially during moonlight, that the heron takes his prey, excepting, indeed, when the calls of his nestlings demand his continual exertions. He may then be seen in lonely and secluded nooks, standing in the water, with glistening eye, and head drawn back, ready for the fatal stroke. Patiently does he maintain his fixed attitude; presently a fish passes; suddenly as lightning, and with unerring precision, arrow-like, he launches his beak, and up

he soars, bearing the captive to his nest. The heron, as well as most of the waders, is capable of swimming for a short time.

The brow and crown of the head are white, bordered above the eyes with black lines, which reach the nape of the neck, where they join a large, flowing, pendent crest, of the same colour. The upper part of the neck in some is white, in others pale ash; the fore part lower down is spotted with a double row of black feathers, and those which fall over the breast are long, loose, and webbed. The shoulders and scapular feathers are also of the same kind of texture, of a gray colour, generally streaked with white, and spread over its down-clothed back. The ridge of the wing is white, coverts and secondaries lead colour, bastard wings and quills of a bluish black, as are also the long, soft feathers which take their rise on the sides, under the wings, and, falling down, meet at their tips, and hide all the under parts; the latter, next the skin, are covered with a thick, matted dirty-white down, except about the belly and vent, which are almost bare. The tail is short, and consists of twelve feathers, of a cinerous or brownish lead colour; the legs are dirty green, long, bare above the knees, and the middle claw is jagged on the inner edge.

The female has not the long, flowing crest, or the long feathers which hang over the breast of the male, and her whole plumage is more uniformly dull and obscure. In the breeding season, they congregate in large societies, and, like the rooks, build their nests on trees, with sticks, lined with dry grass, wool, and other warm materials. The female lays from four to six eggs, of a pale, greenish-blue colour. If they cannot find sufficient accommodation in the trees, they occasionally build their nests on the shelves of rocks, or even on the ground.

There are heronries at Kent, Yorkshire, Penrith, Lincolnshire, near Bristol, Dorsetshire, Windsor, Ayrshire; and in Ireland, at Santry, near Dublin, Louth, Antrim, Derry, Donegal, Sligo, Galway, Kerry, Cork, Waterford, &c. At present, in consequence of the discontinuance of hawking, little attention is paid to the protection of heronries, though none of the old statutes respecting them have been repealed.

THE BITTERN

Was associated with the heron, as one of the "great flight," and protected by severe penalties; but from the superior delicacy of its flesh, was much sought for by the sportsman, and is now comparatively scarce. It is a truly delicious table fowl; if possible, superior to the pheasant. It breeds in the fenny counties in England, and we have frequently met it in Ireland, where it hides in sedges by day, and frequents wild morasses, and the oozy banks of large rivers, where extensive tracts, overgrown with flags, weeds, and bulrushes, afford it an asylum. In the midst of those it crouches during the day, and is with difficulty roused to take wing. Persons frequenting the sedgy sides of unfrequented

rivers, must be familiar with the dismally-hollow booming of the bittern; it is impossible to give those who have not heard this evening call, an adequate idea of its solemnity. It is like the interrupted bellowing of the bull, but hollower and louder, and is heard at a mile's distance, as if issuing from some formidable being, that resided in the bottom of the waters. The bird, however, that, produces this terrible sound, is not as big as a heron, with a weaker bill, not above four inches long. It differs from the heron chiefly in its colour, which is in general of a palish yellow, spotted and barred with black. Its windpipe is fitted to produce the sound for which it is remarkable; the lower part of it dividing into the lungs, is supplied with a thin, loose membrane, that can be filled with a large body of air, and exploded at pleasure. These bellowing explosions are chiefly heard from the beginning of spring to the end of autumn, and however awful they may seem to be, are the calls of courtship, or of connubial felicity.

It hides in the sedges by day, and begins its call in the evening, booming six or eight times, and then discontinuing for ten or twenty minutes to renew the same sound. This is a call it never gives but when undisturbed and at liberty. When its retreats among the sedges are invaded, when it dreads or suspects the approach of an enemy, it is then perfectly silent. This call it has never been heard to utter when taken or brought up in domestic captivity: it continues, under the control of man, a mute, forlorn bird, equally incapable of attachment or instruction. But though its boomings are always performed in solitude, it has a scream which is generally heard upon seizing its prey, and which is sometimes extorted by fear.

This bird, though of the heron kind, is yet neither so destructive nor so voracious. It is a retired, timerous animal, concealing itself in the midst of weeds and marshy places, and living on frogs, insects, and vegetables; and though nearly resembling the heron in figure, yet differing much in manners and appetites. As the heron builds on the tops of the highest trees, the bittern lays its nest in the sedgy margin, or amidst a tuft of rushes. The heron builds with sticks and wool; the bittern composes its simpler habitation of sedges, the leaves of water plants, and dry rushes. The heron lays four eggs, the bittern generally seven or eight, of an ash-green colour. The heron feeds its young for many days; the bittern, in three days, leads its little ones to their food. In short, the heron is lean and cadaverous, subsisting chiefly on animal food; the bittern is plump and fleshy, as it feeds upon vegetables, when more nourishing food is wanted.

It cannot be, therefore, from its voracious appetites, but its hollow boom, that the bittern is held in such detestation by the vulgar. On hearing the bittern's boom, the villagers presage some sad event, and generally find or make one to succeed it. If any person in the neighbourhood die, they suppose it cannot be otherwise, for the night-raven had foretold it; but if nobody happen to die, the death of a cow or sheep gives completion to the prophecy.

Whatever terror it may inspire among the simple, its flesh is greatly in esteem amongst the luxurious. For this reason, it is as eagerly sought after by the fowler, as it is shunned by the peasant; and as it is a heavy-rising, slow-winged bird, it does not often escape him. Indeed, it seldom rises but when about trod upon, and seems to seek protection rather from concealment than flight. At the latter end of autumn, however, in the evening, its wonted indolence appears to forsake it. It is then seen rising in a spiral ascent, till it is quite lost to the view, making, at the same time, a singular noise, very different from its former boomings. Thus the same animal is often seen to assume different desires, and while the Latins have given the bittern the name of the star-reaching bird (or *stellaris*), the Greeks, taking its character from its more constant habits, have given it the title of the lazy.

When wounded by the sportsman, this bird often makes a severe resistance. It does not retire, but waits the onset, and gives such vigorous pushes with its bill, as to wound the leg through the boot. Sometimes it turns on its back, like the rapacious birds, and fights with both its bill and claws. When surprised by a dog, it is said always to throw itself into this posture, and defend itself so vigorously, as to compel its assailant to retire. The eyes of its antagonist are the objects at which it chiefly strikes.

The bill is of a brown horn-colour above; the lower mandible and base of the upper, greenish. The mouth is wide, the gape extending beyond the eyes, with a dusky patch on the angle; the irides yellow. The feathers on the top of the head are black, and somewhat depressed; those on the hind-head, neck, and breast, are long and loose; the plumage, in general, is of a dull, pale yellow, elegantly variegated with spots; and bars of black. The greater coverts and quill feathers ferruginous, regularly barred with black; tail short, consisting of ten feathers; legs pale green; toes and claws very long and slender; the middle claw serrated on the inner edge. The female is rather less, the plumage not so bright, and the feathers on the neck not so long and flowing as on the male. She makes an artless nest, composed chiefly of the

withered stalks and leaves of the high, coarse herbage, in the midst of which it is placed. It is by no means a plentiful species, and is daily becoming more scarce. Its principal food is small fish, frogs, insects, and lizards, all of which have been found, by dissection.

The LITTLE BITTERN is not much larger than a thrush; it resembles the great bittern in form and colour, and is very rarely met with in Great Britain, but has, however, been lately killed near Shrewsbury, and recently at Sandymount, march, County Dublin, by Edward W. Winder, Esq.

THE CAPERCALZIE,

WOOD GROUSE, OR COCK OF THE WOOD,

Is the first of this genus, in order and in consequence, and the noblest of the British feathered game; and its size, strength, and beauty, have proved its destruction. In ancient times they were tolerably abundant in the primeval forests of Ireland and Scotland; from the former they have been extirpated at an early period. Their destruction in Scotland has been more gradual, and, the supposed last, traced down to a late period, in the neighbourhood of Inverness. It is hoped, however, that the species will be again restored to the Scottish forests. The male bird is sometimes found of the size of the turkey, weighing near fourteen pounds; they are seldom seen, but in the darkest and inmost recesses of the woods and heathy mountains, or piney forests, feeding on the cones of the pine tree, and will sometimes entirely strip one tree before they offer to touch those of another. In summer they venture down from their retreats, to make short depredations on the farmers' corn, but are not easily surprised out of their native haunts.

The cock of the wood, when in the forest, attaches himself principally to the oak and the pine trees—the cones of the latter serving for his food, and the thick boughs for a habitation. He feeds, also, upon ants' eggs, which seem a delicacy to all birds of the poultry kind; cranberries are likewise found in their crop, and his gizzard, like that of domestic fowl, contains a quantity of gravel, for the purpose of assisting his powers of digestion.

At the early return of spring, this bird begins to feel the genial influence of the season. During the month of March, the ap-

THE CAPERCALZIE.

proaches of courtship are continued, and do not desist till the trees have all their leaves, and the forest is in full bloom. During this whole season, the cock of the wood is seen at sunrise and setting, extremely active upon one of the largest branches of the pine tree. With his tail raised, and expanded like a fan, and his wings drooping, he is seen walking backward and forward, his neck stretched out, his head swollen and red, and making a thousand ridiculous postures, his crying, upon that occasion, is a kind of loud explo-

sion, which is instantly followed by a noise like the whetting of a scythe, which ceases and commences alternately for about an hour, and is then terminated by the same explosion.

During the time this singular cry continues, the bird seems entirely deaf and insensible of every danger. Whatever noise may be made near him, or even though fired at, he still continues his call, and this is the time that sportsmen generally take to shoot him. Upon all other occasions, he is the most timorous and watchful bird in nature; but now he seems entirely absorbed in his instincts, and seldom leaves the place where he first begins to feel the access of desire.

This extraordinary cry, which is accompanied by the clapping of the wings, is no sooner finished, than the female, hearing it, replies, approaches, and places herself under the tree, from whence the cock descends to visit her. The number of females that, on this occasion, resort to his call, is uncertain; but one male generally suffices for all.

The length of this bird is about two feet eight or nine inches. The bill is above two inches long, very strong; the upper mandible much convex and hooked, the point hanging over the under mandible very considerably when closed, as in birds of prey, and projecting over the sides, not meeting at the edges as in most birds, by which means it can cut its food like a pair of scissors; the colour yellowish, irides hazel. The nostrils are covered with dusky feathers; over the eye is a bare, red skin, and under the eye a spot of white feathers; the head is dusky, a little dashed, with ash-colour; the feathers on the chin and throat are dusky, black, and long; the neck dark, ash-coloured, finely speckled with dusky; the breast is a fine, dark, glossy green; the rest of the under parts black, with spots of white most about the thighs and vent; the wing coverts and scapulars chesnut-brown, finely speckled with dusky; at the junction of the wing to the body is a little white; greater quills, dusky; secondaries like the coverts, slightly tipped with white; the lower part of the back, rump, and upper tail coverts, ash-colour, marked with innumerable small, undulated lines, and specks of black, the two outer rows of feathers, covering the tail, are greatly longer than those in the middle, and gradually lengthening, the under one reaching nearly to the end of the tail; these are seven or eight in number, lying immediately over each other; their ends are white, making as many white bars on each side; the tail is considerably rounded, consisting of eighteen black feathers, marked with a few spots of white on the sides; the legs are covered with brown hair-like

feathers; the edges of the toes strongly pectinated; claws dusky and blunt.

The female is much less than her mate, and entirely unlike him in her plumage, so that she might be mistaken for another species; she lays from eight to sixteen eggs, which are white, and marked with yellow, of a larger size than those of a common hen; she generally lays them in a dry place, and mossy ground, and hatches them without the company of the cock; when she is obliged, during the time of incubation, to leave her eggs in quest of food, she covers them up so artfully, with moss, or dry leaves, that it is extremely difficult to discover them; on this occasion she is extremely tame and tranquil, however wild and timorous in ordinary; she often keeps to her nest, though strangers attempt to drag her away.

As soon as the young ones are hatched, they are seen running with extreme agility after the mother, though sometimes they are not entirely disengaged from the shell, the hen leads them forward for the first time, into the woods, shows them ants' eggs, and the wild mountain berries, which, while young, are their only food; as they grow older, their appetites grow stronger, and they then feed upon the tops of heather and the cones of the pine tree; in this manner, they soon come to perfection. They are a hardy bird, their food lies everywhere before them, and it would seem that they should increase in great abundance, but this is not the case, their numbers are thinned by rapacious birds and beasts of every kind, and still more by their own salacious contests. As soon as the clutching is over, which the female performs in the manner of a hen, the whole brood follows the mother, for about a month or two, at the end of which the young males entirely forsake her, and keep in great harmony together, until the beginning of spring. At this season they begin, for the first time, to feel the genial access, and then adieu to all their former friendships, they begin to consider each other as rivals, and the rage of concupiscence, quite extinguishes the spirit of society; they fight each other like game cocks, and at that time are so inattentive of their own safety, that it often happens that two or three of them are killed at a shot; it is probable that in these contests the bird which comes off victorious, takes possession of the whole female flock, as it is certain they have no faithful attachments.

There has been many recent attempts to re-establish this fine bird in Scotland. The Duke of Athol, Lord Breadalbane, and Lord Fyfe, having each introduced them from Sweden, with every prospect of success; the female birds having layed abundantly in

confinement, and their eggs being incubated by the common hen, after a sitting of twenty-nine days, and in other instances, placed in the nest of the black grouse, and hatched by the female of that bird, her own eggs being removed from her nest. She has been found a most careful, persevering and attentive mother, and the young birds have attached themselves to the quarters where they were reared. They are abundant in Northern Asia, Russia, Siberia, Norway, Sweden, Germany, Italy, and several parts of the Alps. They are reckoned royal game, and the female is prohibited, under a severe penalty, being shot. They are often domesticated, and become so perfectly tame, as to feed out of the hand; and are fed on spruce, fir, pine, juniper sprigs, and oats.

THE BLACK GROUSE, BLACK COCK, OR HEATH FOWL,

Is pretty generally spread over Europe, being found in France, Germany, Russia, Sweden, Norway, &c., and the farther north the more abundant. It is found in various parts of Great Britain, in Scotland, the Hebrides, and in Wales. It has been shot in the county of Sligo, in Ireland, where the breed was formerly introduced, out of Scotland, but it is supposed to be extirpated there. They are met with in Dorsetshire, Devonshire, the New Forest in Hampshire, Ashdown Forest, in Sussex, Staffordshire, and Shropshire, but, in those districts, are now less abundant than formerly.

They frequent moist flats or meadows, with a rank and luxuriant herbage, and where the glades or passes among the hills are clothed with natural brush, of birch, hazel, willow, and alder, and have a tangled bottom of deep fern. These afford an abundant supply of food and shelter, from the cold at night, and from the rays of the midsummer's sun.

The plumage of the adult male is, on the upper parts, of a rich, steel-blue; on the under parts, pitch black, which duller colour, also, is seen on the secondaries and wing-coverts. The secondaries are tipped with white, forming a bar across the wings, conspicuous in flight, and the under-tail coverts are of the same pure white. The form of the tail is, however, the most curious structure in this bird, in being forked, and having the feathers bending outward, and consists of sixteen black feathers. The thighs and legs are covered with dark brown feathers: the toes resemble those of the wood-grouse. The male bird weighs about four pounds; its length one foot ten inches, its breadth two feet nine.

THE BLACK GROUSE.

The female bears the most unobtrusive colours, which run through this sex, in the rest of the group, and has a chaste and beautiful arrangement of brown, black, and grayish yellow. The fork of the tail is very slightly seen. She weighs only two pounds; her length is one foot six inches: her breadth two feet six. The head and neck are marked with alternate bars of dull red and black, the breast with dusky black and white, but the last predominates. The back, coverts of the wings, and tail, are of the same colours as the neck, but the red is deeper. The inner webs, of the quill feathers, are mottled with black and white; the inner coverts of the wings are white, and in both sexes, form a white spot on the shoulder. The tail is slightly forked, and variegated with red and black; the feathers under the tail are white, marked with a

few bars of black and orange. She makes an artless nest, on the ground, and hatches her young late in summer. She lays from six to eight eggs, of a dull, yellowish-white colour, marked with numbers of very small, ferruginous specks, and towards the smaller end, with some blotches of the same hue.

They feed on bilberries and other mountain fruit, and in the winter on the tops of heath; in the summer they frequently descend from the hills, to feed on corn. They never pair; but in the spring the male gets upon some eminence, crows, and claps his wings, on which signal all the females within hearing resort to him. The young males quit their mother, in the beginning of winter, and keep in flocks of seven or eight till spring. During that time they inhabit the woods; they are then very quarrelsome, and will fight together like game cocks, and, at that time, are so inattentive to their own safety, that it has often happened, that two or three have been killed at one shot.

When the snow begins to fall heavy, the black grouse betake themselves to the shelter of tall heath, juniper, or any other plant that will afford them cover, while the violent wind, with which falls of snow are usually accompanied, continues, or they roost under the thick branches of the pines, and occasionally perch on the trees.

Like the greater portion of the true grouse, the black grouse is polygamous, and, during the months of January, February, and March, when his adult plumage, of glossy steel-blue, is put on, he is a noble-looking and splendid bird. If the weather continues warm, the flocks soon separate, and the males select some conspicuous spot, from whence they endeavour to drive all rivals, and commence to display their arts to allure the females. The places selected, at such seasons, are generally elevations. There, after, perhaps, many battles have been fought, and rivals vanquished, the noble, full-dressed, black cock, takes his stand, commencing at first dawn; and, where the game is abundant, the hills on every side repeat the murmuring call, almost before the utterers can be distinguished. They strut round the spot selected, trailing their wings, inflating the throat and neck, and puffing up the plumage of these parts, and the now brilliant, red skin above the eyes, which is of the deepest scarlet; raising and expanding their tail, displaying the beautifully contrasting white under coverts, and imitating, as it were, the attitudes of a little turkey cock; he is soon heard by the females, who crowd around their lord and master.

After the females deposit their eggs, the male birds lose their

feeling for love and fighting, and re-assemble in small parties, and seek the shelter of the brush and fern, to complete a new moult.

The sexes continue separate until winter, when the old males join with the young brood. Upon the females devolve the whole duties of rearing and protecting the young.

During the summer, the general food is the seeds of the various grasses, and the berries of the different Alpine plants, such as the cran and crowberries, blaeberries, &c.; and in winter, the tender shoots of the fir, catkins of birch and hazel, afford them support in the milder districts, and often give their peculiar flavour to the flesh; but in all the lower districts, where, indeed, this bird is most abundant, the gleaning of the stubble, yields a plentiful meal. Fields of turnips or rape are also favourite feeding-places, and the leaves yield them a more convenient supply of food, during hard frost, than they could elsewhere provide. In some places flocks of hundreds assemble at feeding time; for of late years, "the bonny black cock" has increased in Scotland to an immense extent, and from the life of the hens, being, in a certain degree, protected, a sufficient breeding stock is always kept up. At the season of their thus assembling in flocks, they are extremely shy and wary.

It is a matter of regret and surprise, that the lovers of field sports do not re-establish the beautiful black cock in this country; nothing could be easier: they find their food everywhere—on the mountain, in the valley, and in the corn field, and have been bred in a domestic state. Any number could be had from the Scottish moors.

The time for shooting heath fowl (black game) begins on the 20th August, and ends on the 10th December. The mere possession of these birds at any other period of the year (except such as may be kept tame) subjects the party (13 Geo. III., c. 55) to a penalty of not more than £20 nor less than £10 for the first offence, and for every subsequent offence, to not more than £30 nor less than £20, half to go to the informer, and the other half to the poor of the parish; and in case where neither penalty nor distress can be had, to imprisonment, of not less than three, or more than six months. In New Forest the season for heath fowl does not commence till the 1st September.

THE RED GROUSE.

"Wildly majestic! What is all the pride
Of flats, with loads of ornament supplied?
Unpleasant, tasteless, impotent expense,
Compared with Nature's rude magnificence."

THE RED GROUSE, GORCOCK, OR MOORCOCK,

Is found in great plenty in the wild, heathy, and mountainous tracts of the northern counties of England; it is likewise common in Wales, and the Highlands of Scotland; and in all the heath-clad bogs and mountains in Ireland, they are found more or less abundant. It is said to be peculiar to the British Isles, at the same time, Buffon describes a variety, found in France, Spain, Italy, and elsewhere, so nearly resembling our British red grouse, that it is supposed they would breed together, the trial of which

is devoutly to be wished, as the introduction of fresh blood is most essential to the preservation of animals, and nothing has needed it more than the subjects of which I am now treating—the young, in some seasons, being so dreadfully ravaged by the tape-worm, as to threaten the destruction of all those in the district in which it occurs. It would, therefore, be much to be regretted, if unlimited persecution, or want of preservation, should, in after years, extirpate this bird, said to be so exclusively national. It is well known, that on all the more southern moors, not a tenth of the former number of birds at present exist, and it is only in the more remote districts, where access and accommodation for sportsmen are in some degree wanting, that they are to be seen in anything like their former numbers. In former days, the Earl of Strathmore's gamekeeper, for a considerable bet, undertook to shoot forty brace of game, upon his lordship's moors in Yorkshire. By two o'clock he had killed forty-three brace.

The male of this bird weighs about twenty ounces; length, sixteen inches; bill black; irides hazel. Above the eye is a scarlet-fringed membrane, bare of feathers; the nostrils are covered with black and ferruginous feathers; the head and neck pale tawny, spotted black; breast and belly dull purplish brown, crossed with numerous, narrow, dusky lines; quills dusky. The tail consists of sixteen feathers; the four middle ones are barred with tawny red; the rest black; legs covered with soft, whitish feathers, down the claws, which are of a light, horn colour, broad and concave underneath.

The female weighs about sixteen ounces; the colour not so dark as on the male.

They prefer the extensive, uncultivated wastes, covered with heath, particularly the most mountainous situations. The mountains of Wales, are now the most southern parts, these birds are found in. They are not uncommon in Yorkshire, and from thence northward, upon the moorlands, but nowhere so plentiful as in the Highlands of Scotland, where the moors are unbounded.

The hen lays from eight to fourteen eggs, much like those of the black game, but smaller. The young keep with the parent bird till towards winter, and are called a pack or brood. In November they flock together in great numbers, sometimes thirty or forty, where they are plentiful, at which time they are extremely shy, and difficult to be shot.

In severe winters, moorgame comes lower down to the mountains in Scotland, and flock together in prodigious numbers: according to Thornton, three or four thousand assembled in one

year. The same author, in his sporting marches, encamped at the source of the Dalmon. "The game on these moors," says he, "is innumerable. In a mile long, and not half a one broad, I saw, at least, one thousand brace of moorgame." Such days of plenty will scarcely ever be seen again. Since the communication between the countries has been facilitated, by good roads, ready conveyance, and excellent accommodation, parties have been continually formed in England and Ireland, to make sporting tours in the Highlands of Scotland, and slaughter is the word.

Mr. Grierson, of Rathfarnham, County Dublin, had a cock grouse in captivity for thirteen years, during which time it proved a most faithful sentinel, never permitting a stranger to enter (which it would at once recognize), without a challenge. He has bred them in a domestic state. They have likewise been bred in the aviary of the Duchess Dowager of Portland. Lord Stanley asserts his knowledge of their breeding in captivity, and a very near neighbour of mine has bred them, within a few doors of me, on Bachelor's-walk, Dublin. A hybrid variety, between a bantam cock and female grouse, has been bred in an aviary near Dublin.

Ants' eggs, grasshoppers, and other insects, are the favourite food of the young; as a substitute, alum-curd or hard-boiled egg will answer the purpose of feeding them. They are particularly partial to grasshoppers, which is the best food they can get from the first month. In confinement, they are very easily tamed, and become familiar, are hardy and healthy. Adult birds are partial to boiled potatoes and raw apples; they must likewise have an occasional supply of green heath.

The red grouse pairs very early; if mild, in January, and the female commences laying at the end of March. The eggs are deposited in a shallow hollow, at the foot of some tuft of heath, which affords a partial covering and shelter, and only a few dry grasses serve to separate them from the ground. Both parents attend and boldly defend the nest or young from the ordinary aggressors. The young leave the nest almost as soon as hatched, and continue to follow the hen till the severity of the winter sets in, when they unite in packs. They continue together, in the greatest harmony, till the approach of spring, when, beginning to feel the access of genial desire, the males view each other with a jealous eye, and furious battles are the consequence.

The care and stratagem of the hen, for the security of the young, are wonderful. If she sees a dog approach her brood, she will throw herself on the ground, directly before his nose, with screaming, and manifest at the same time, an apparent incapacity

of flying. The dog eagerly pursues, expecting every moment to catch her, but when she has drawn him a sufficient distance from her treasure, she puts forth her powers and leaves her astonished pursuer to follow her with his eyes.

Grouse shooting is very laborious, particularly in such mountains as the sportsman is a stranger to. As the season is generally the hottest in the year, it becomes necessary to be clothed accordingly. The lighter the dress the better, taking care at the same time, to let the garments next the skin chiefly consist of flannel. Flannel, so capable of retaining warmth, is the most effectual non-conductor of heat, and the person who habituates himself to wear it, will experience no increase of heat in summer, on that account; at the same time, nothing will so effectually absorb the moisture which arises from excessive perspiration, and, consequently, better prevent taking cold. Those who dislike flannel should adopt calico; linen becomes unpleasant, as adhering to the back, after excessive heat. Easy, short boots, laced, are the best wear. While in a heat, sportsmen should be cautious as to the use of cold water; fatal consequences have frequently arisen from it. The Highland pony is frequently made to lessen the fatigue of grouse shooting, being trained to stand still while the sportsman takes his aim and shoots. In bad weather the grouse will be found at the foot of the mountains; if changeable, at about midway on the hills; and if fine, they will be found near the tops.

These birds go to water immediately after their morning flight, which is the proper time to begin a day's diversion. From that time till the extreme heat of the day comes on, good sport may be obtained, also from three o'clock till sunset. At mid-day, the grouse creep under the deep roots, to shelter themselves from the excessive heat of the sun; at the same time they will be often found in mossy places. Give your dogs the wind, and try the sides of the mountains which are most sheltered; if it blow hard, you will find them under the longest heath, from which, if raised, they frequently take long flights, and, for the most part, down the wind, contrary to most other birds.

On finding a pack of grouse, the old cock is generally the first that makes his appearance, and the first to take wing. If he has not been much disturbed, he will run out before the dogs, making a clucking noise, and will frequently get up and challenge, without any symptoms of fear for himself; by this he warns the hen and poults, who immediately begin to run and separate. The hen generally runs as fast as she can from you, in order to draw your attention from the poults; and if the poults are strong enough

to shift for themselves, they will sometimes make off altogether, in which case good sport will generally follow.

The main object, however, should be to kill the old cock, which will most likely enable you to pick up the young ones, one after another. After hearing the discharge of a gun, which terrifies them, they lie so close that you may sometimes take them up in your hand from under the dog's nose.

If the night should have been wet previous to the day of shooting, grouse will not lie. They will erect their heads and run, and the only chance the sportsman has is to run also, which, however, is not recommended, as it is sure to spoil the dogs, for, seeing you run, they will do the same. No sport is so laborious for either man or dog as that of grouse shooting; two or three brace of dogs are indispensable, only one brace to be hunted at a time, and that for only half a day, which will afford all the dogs a sufficient time for refreshing.

Grouse are difficult to be netted, owing to the straggled manner in which they lie, and their scattering on the approach of the sportsman, at the least noise. Two or three brace are the most that can be taken at a time in this way, and very seldom so many.

Burning heath on the mountains, as it is done chiefly in the spring, is very destructive to grouse, for by this means numbers of nests are destroyed. There is an act of parliament against it. If it is practised, care should be taken in burning, as, in a dry season, with a high wind, it has not only set the mountain in a blaze, but communicated to several adjoining woods.

Deer stalking and grouse shooting are the favourite amusements of the native chiefs. Clad in the tartan and bonnet of his clan, gun in hand, the Celt mounts his well-trained Highland shelty, and ranges his ancestral hills.

No species of shooting requires the aid of good dogs more than grouse shooting, and in no sport does so much annoyance result from the use of bad ones. The best dog, perhaps, for the moors, is a well-bred pointer, not more than five years old, which has been well tutored, and a veteran in experience. The setter is occasionally used, but I prefer the pointer. The latter has unquestionably the advantage when the moors are very dry, as it not unfrequently happens in August. If a setter cannot find water wherein to wet his feet every half hour, he will not be able to undergo much fatigue. Some shooters use a couple of spaniels for grouse shooting, in preference to any other team of dogs. Of course, when this method is pursued, the birds are never pointed, and the shooter must be on the look out, but the game is gene-

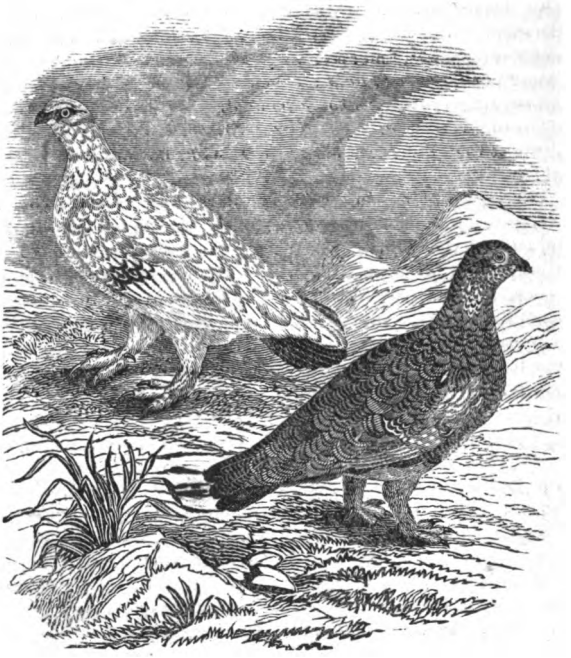
rally flushed very near the gun. I am not quite sure that a sportman can be better *dogged* for grouse shooting, than with a couple of spaniels, and an old, staunch pointer, unless he is a very dilatory or slow shot, or is startled when birds rise unexpectedly, and requires every bird to be pointed. It is the power to bring down, in good style, bird after bird, thus flushed, that makes apparent the difference between the good shot and the indifferent one.

The Irish setter is in much request on the Scottish moors.

The season for grouse shooting commences on the 12th August, and ends on the 10th December. The penalties are the same as before stated as to black game. Upon grouse mountains or wastes, the occupier is forbidden to burn heath, furze, &c., between the 2nd February and the 24th June, upon pain of being committed to the House of Correction, there to be whipped and kept to hard labour, for a period not exceeding one month, or less than ten days.

THE PTARMIGAN, WHITE GROUSE, OR WHITE GAME,

Is very nearly as large as the red grouse; weight, about 19 ounces; its bill is black; in its summer plumage, the upper parts of its body are of a pale brown, or ash colour, mottled with small, dusky spots and bars; the bars on the head and neck are somewhat broader, and are mixed with white; the under parts are white, as are also the wings, except the shafts of the wings, which are black. In the month of September, it begins to change its plumage, and about the middle of October, it is of a pure white, excepting that, in the male, there is a black line between the bill and the eye. The tail consists of sixteen feathers; the two middle ones are ash-coloured, in summer, and white in winter; the next two are slightly marked with white, near the ends; the rest are wholly black; the upper tail coverts are long, and almost cover the tail. As in all this genus, the legs and toes are completely covered with hair-like feathers, to the very claws; and in winter, so deep and thick does the covering become, as to give to the legs the appearance of a "hare's-foot." Small, closely-set feathers also invest the beak, which increase during the colder season, till little more than the point of the latter is visible. A naked skin rises above each eye. As spring advances, the ptarmigan begins to lose the pure white of his plumage, and regains his variegated, summer dress. They are found in most of the northern parts of Europe, even as far as Greenland, where they brave the severest



Winter plumage. Summer plumage.

THE PTARMIGAN, WHITE GROUSE, OR WHITE GAME.

cold. It is likewise abundant in the northern parts of America, including the islands to the south and west of Baffin's Bay. It is common on the Grampian Hills, where the granite rocks, and slaty masses afford concealment. It is abundant on the highest summits of the highest hills in the north of Scotland and the adjacent islands, but only on the most elevated parts of the highest mountains. They are of rare occurrence in Ireland, but I have seen some specimens that have been shot there, one by Mr. Darley, on the Three-rock Mountain, county Dublin, and another from the north of Ireland, both preserved by Mr. Glennon, of Suffolk-street.

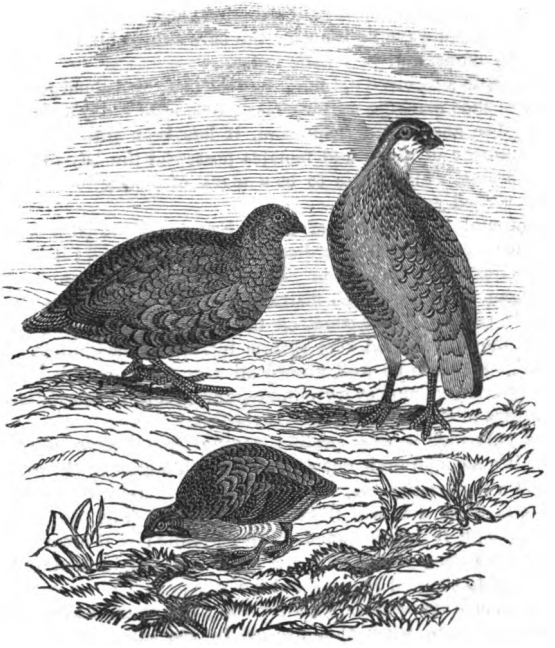
Mountain berries and heath shoots supply their food in summer, and buds and leaves in winter; and at this season, the birds are obliged to burrow, under the snow, partly for shelter, and partly in quest of food. A variety of this bird, previously supposed to be confined to America, has been lately found in Scotland—the rock ptarmigan, which resembles the common ptarmigan very much in plumage; in both birds, the plumage is of the most unsullied white, during the winter. The size is less than the common ptarmigan.

They inhabit the most barren and rocky spots, often where nothing is to be seen but an interminable series of rugged rocks, distributed in boulder masses, varying in size, from large lumps, to pieces of a few inches diameter; there, during spring and summer, they pair, and their broods remain the only inhabitants, and are discovered with the greatest difficulty, the mixture of the colours of the plumage, forming a tint which harmonizes with that of the gray rocks around. At this season, they are also tame and familiar, running before the intruder, and uttering their peculiar, low, wild call, which is often the means of their discovery; in this way they will often reach the opposite edge of a rock, and will, as it were, simultaneously drop off; but the expectation of finding them on some lower ledge will be disappointed, for they have, perhaps, by that time, sought for and reached the opposite side of the mountain, by a low, wheeling flight, as noiseless as the solitudes by which they are surrounded. The nest is made under the rocks and stones, where the hen deposits ten or twelve eggs, of a dirty white, spotted and blotched with Rufus-brown, and is very difficult to be found; for the female, on perceiving a person approach, generally leaves it, and is only discovered by her motion over the rocks, or her low, clucking cry. The young run about as soon as they leave the shell, and are quite on the alert, concealing themselves with great skill, on the approach of danger. In winter they descend lower, but seldom seek the plains. Both old and young assume the colour of the lichen-coloured rocks they frequent, which preserves them, both from the sportsman and birds of prey; and in the winter, becomes as white as the surrounding snow. It is by no means a shy bird, but will suffer the sportsman to approach very near. After the breeding season, both old and young associate in large flocks, consisting of forty or fifty individuals.

Of the number of ptarmigans imported during the latter part of the winter and early in the spring, from Norway, Sweden, &c., to the London market, few persons have an idea. "On one occa-

sion," says Mr. Yarrell, "late in the spring of 1839, one party shipped six thousand ptarmigans for London, two thousand for Hull, and two thousand for Liverpool; and at the end of February, or very early in March, of the year 1840, one salesman in Leadenhall-market, received fifteen thousand ptarmigans that had been consigned to him; and during the same week, another salesman received seven hundred capercalzies, and five hundred and sixty black grouse." From Drannen, in Norway, in 1839, two thousand dozen of ptarmigans were exported in one ship for London; sixty thousand have been killed in a single parish, during the course of the winter. The total of these birds destroyed throughout Norway and Sweden, every season, we do not know, but it must be enormous. Mr. Murphy, of William-street, Dublin, has, for a series of years, been an annual importer of the Norwegian white grouse, as well as the capercalzies, and black cock, some fine specimens of which we have seen in his possession.

It may not be out of place, to give a catalogue of some of the articles necessary to a grouse-shooter's equipment, previous to his starting for the moors:—Dogs, fowling-piece, in case or bag; two extra pivots, a pivot-pricker, pivot wrench, gun-rod or cleaner, a small bottle of olive oil, some linen cloth and leather, powder-flask, dram-flask, shot-belt, bird-bag, a canister of powder, a quantity of shot, various sizes; a few pair of woollen stockings, strong laced boots, or strong shoes and gaiters, dark shooting dress, copper caps and box, wadding, screw-turner, spring crank, wadding-punch, shoe-oil, straps, collars, couples, and cords for leading or tying up dogs, dog-whistle, dog-whip, a pocket-knife, a pen-knife, some cord for tying up game, hampers, in which grouse may be packed between layers of heath, sealing-wax and seal, to mark birds when sent by coach or carrier, game certificate, card of permission or other authority to produce to the game-keeper, sandwiches, cigars, soda powders, promethians, brandy, &c. This memorandum may not suit every fancy; some will omit, and others add to the above; it will, therefore, be for the sportsman to ask himself, what he is likely to want, when on the moors. Of course, the usual dressing and writing materials will not be omitted.



COMMON PARTRIDGE, RED-LEGGED PARTRIDGE, AND QUAIL.

THE COMMON PARTRIDGE,

Being so well known, requires but little to describe it; length, about thirteen inches; weight, fifteen ounces; the bill is bluish-brown, irides hazel; general colour of the plumage, cinerous brown, and black mixed; some of the back and coverts streaked with buff; sides of the head, bright rust-colour; behind the eye, a naked, red, warty skin; on the breast, a deep bay-coloured mark, in form of a horse-shoe; the tail consists of sixteen feathers, of a bright rust-colour, except the four middle ones, which are like the back; legs, bluish-gray. The female weighs about fourteen ounces; the head is less bright, and the coverts of the ears inclining to gray; the horse-shoe on the breast is white for the

first year, afterwards more or less like the male, and, by the second year, is no longer a mark of distinction; whereas, by the head, the sexes may always be known; the bare skin behind the eye, is less conspicuous, and very little red.

It has been a received opinion, that the male bird alone possessed the horse-shoe marking on the breast, but, after a day's shooting, and a close anatomical inspection, it has been proved that an equal number of males and females possessed the bay-markings on the breast, which cease to be a mark of distinction after the first or second year.

It is found in all parts of Great Britain, where corn is cultivated, but never at any great distance from arable land; it is never seen on the barren mountain. The partridge, the grouse, and the ptarmigan, have each their district; the first is only found in the glens or valleys; the second, on the first hills; the last, on the highest mountains, and very seldom intrude on each other. The partridge seems to be well known all over the world; it is found in every country and every climate, and seems to adapt itself to the nature of the climate where it resides.

The partridge is very prolific, laying from twelve to twenty eggs; it makes no nest, but scrapes a small hollow in the ground, placing a few contiguous, fibrous brambles therein, to deposit its eggs on; these are of a light brown colour. The old birds sit very close on their eggs when near hatching; it is asserted that a hen partridge, taken with her eggs and put in confinement, continued to sit, and brought out her young.

The time of incubation is three weeks; the young leave the nest in twelve hours, when they are led by the parent birds to ant-hills, on the eggs of which they principally feed at first. The affection of the female for her young is particularly strong and lively; she is greatly assisted in the care of rearing them by her mate; they lead them out, in common, call them together, point out to them their proper food, and assist them in finding it, by scratching the ground with their feet. They frequently sit close by each other, covering their young with their wings, like the hen; in this situation they are not easily flushed, but when, at length, they are compelled to move, the male employs many interesting stratagems, such as fluttering along the ground, hanging his wings, and feigning to be wounded, in order to attract the pursuit of the enemy, and afford the female time to escape with her infant brood.

The birds flock together in broods till the returning spring. Sometimes three or four coveys will assemble in winter, and are

then exceedingly shy; in vain may the sportsman pursue them, unless by surprise he can break or scatter the covey. About the middle of February they begin to pair. In June they lay, and the young are excluded about the middle of July, and in about three weeks are capable of flying. This is one of the few birds known under the denomination of game, and protected by the legislature. The partridge season commences on the first of September, and ends on the first of February. They occasionally vary in the colour of their plumage; buff-coloured and white are not uncommon.

"On the first day of partridge shooting, being visited by two friends, after a cordial shake of the hand, we partook of a hasty and hearty breakfast, consisting of coffee, eggs, beefsteaks, and ale, and then sallied forth, with a couple of brace of dogs at our heels, and our double-barrels in the best possible order; scarcely had we entered the stubble, when Juno, a staunch old pointer, winded the game, and at once became as stiff and motionless as a statue, her eyes almost bursting from their sockets, her nostrils distended, in a state which betrayed the painful anxiety of her mind, her front and hind foot, placed, as if she was afraid that her silent tread may cause alarm, and her tail standing as straight and stiff as a quarter-staff; she seemed in agony, awaiting some relieving tones of encouragement from her master, when the welcome words, 'To ho!' convinced her that she had acquainted him that birds were nigh. The other dogs backed beautifully, and although they seemed to envy Juno's sagacity and perseverance, yet they knew their duty too well to interrupt her; consequently, throwing themselves into their favourite attitudes, each peculiar to himself, they awaited with caution and patience the advance of their leader. Our sportsmen walked briskly up to the leading dog, and she led us within thirty yards of the covey;—'O-r-r-r-o-o-o,' and up went about five and twenty birds—bang—bang—bang—bang—bang—bang—cracked the Joe Mantons, and down came three brace of birds, which we picked up and bagged without delay. This was a good beginning, and thus we followed it up till about nine o'clock, when we had bagged twenty brace of partridges and six brace of hares. From nine till two we had harder work, the sun shone in our faces, and we had become somewhat fagged; however, we had three and forty brace, or eighty-six head of game in the bag; and, now, we betook ourselves to luncheon—sandwiches, porter, soda-water, and champaigne, proved a delightful interlude, which we enjoyed in the true gipsy style, under a hedge; but, alas! the clouds began to gather, and a

most pitiless storm came on, which proved a timely protection to the birds, and a very good excuse for our return home to dinner. The latter part of the day proved a worthy sequel to its commencement, having fully enjoyed the conviviality of a sporting bachelor's table."

"Come, come, my good fellows, attend to my song,
And I'll learn you the way to live happy and long;
Throw, throw off the tricks of the dull, smoky town,
To rise with the lark, and lie down with the clown;

With your pointers and gun, to the stubbles repair,
To bring down the partridge or fleet-scudding hare;
To start the gay pheasant, in woodland concealed,
For there's nothing gives health like the sports of the field."

The great partridge match, between Lord Kennedy and Mr. W. Coke, for two hundred sovereigns, took place on the 26th of September, and the 4th of October, 1823. Mr. Wm. Coke to shoot over his uncle's manor, in Norfolk, and Lord Kennedy in any part of Scotland he pleased. Mr. Coke bagged 85½ brace of birds, on the first day, and on the second 87½, making in all 173 brace of partridge, and a number of pheasants, not included. Lord Kennedy chose for the scene of his exploits, Mantraith, in Scotland, a manor belonging to Sir William Maxwell. On the first day of trial his lordship bagged 50, and on the next day 82 brace, being in all 132 brace of partridge, in two days.

Another extraordinary partridge shooting match for one thousand guineas, between the Hon. G. Anson and Mr. Ross, came off at Milden-hall, Suffolk, in November, 1828; each party was allowed three guns and three loaders, that no delay might take place. In the first hour only four birds were shot, and Colonel Anson shot three out of the four. At three o'clock the match was even, both having killed ten brace of birds, and it was even again at four o'clock. At this time Colonel Anson killed another bird, which made him one a-head, but he became so weak that he could no longer follow Mr. Ross, and although only ten minutes remained, Colonel Anson's friends advised him to propose a draw-match, as Mr. Ross would in all probability, either tie or beat him, which he did, and Mr. Ross very handsomely accepted the proposal. The number of birds actually scored was twenty-three and a half brace. Many other birds were killed, but it could not be decided, by the umpires, to which party they belonged.

RED-LEGGED PARTRIDGE, GUERNSEY PARTRIDGE, BARBARY PARTRIDGE.

In the present species, which is half as large again as the common English partridge, the general colour of the upper surface is reddish-brown; the breast of a bluish ash-colour, the under part reddish; the throat pure white, bordered with a deep, black band, which passes upwards as far as the eyes; and the bill and legs red. The plumage of the sides is marked with some regularity, by a series of transverse crescent-shaped bars of black, white and chesnut, which gives the bird a very striking appearance, and at once distinguishes it from the common species.

The red-legged partridge is plentiful in France, Spain, Portugal, and Italy, but does not inhabit Switzerland, Germany, or Holland. In England, it is frequently termed the Guernsey partridge, from being met with in that island, from whence it is supposed, but rarely, to extend its flight to the southern coast of Britain. Of late years, it has been successfully introduced into our preserves, and the birds that have escaped from them will, probably, at no very distant period, render it an abundant native with us. Wherever it obtains ground, it drives the common species out of the preserves, and threatens to exterminate the Aboriginal race. It prefers hilly situations, and nests in fields and copses, like the common species, but is by no means of so sociable a disposition; for, though it forms large coveys, the individuals comprising them neither keep so close together, nor take flight at the same moment. They are rather preferred for their size and beauty than as game birds, as they will run for the length of the day, without rising, to the manifest spoiling of the dogs. The female lays from fifteen to eighteen eggs, of a dirty white, with scattered, reddish spots. In captivity, they are more easily tamed than the common bird, the flesh is light-coloured, and in high estimation.

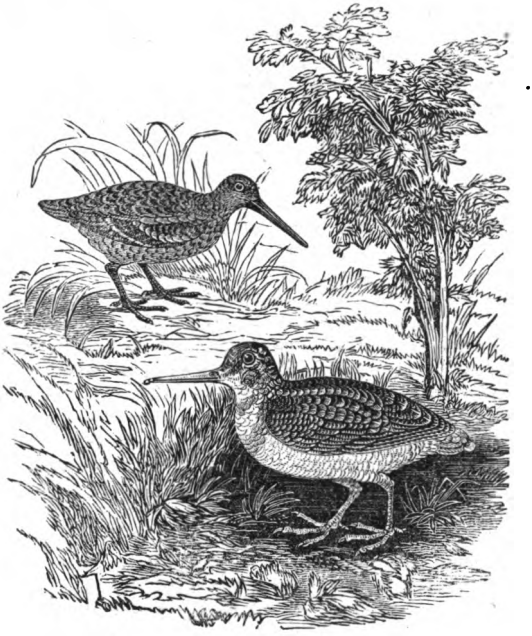
Mr. Daniel, in his field sports, says they are plentiful near Oxford, the Marquis of Hertfort having imported many thousand eggs, which were hatched under hens and liberated. He says he saw a covey consisting of fourteen of these birds, several of which he shot. They are likewise to be found in the neighbourhood of Ipswich, and seem to prefer heathy grounds to corn fields. They are found, but not very abundantly, in the county of Dublin; but are rather more plentiful in the neighbourhood of Galway than the common sort. Wheat, and corn of all sorts, with the leaves

of several plants, and insects, furnish them with food; they never become so familiar as the quail, but sufficiently so to breed in the aviary.

THE QUAIL.

Is about seven inches and a half in length; bill dusky; irides hazel, in old male birds yellow; the crown of the head is black, transversely marked with Rufus-brown; down the middle is a yellowish-white line; above the eye, passing backwards, is another line of the same colour; on the chin and throat is a black mark, which turns upwards to the ears; the rest of those parts are white; the hind parts of the neck, back, scapulars, and tail coverts, are Rufus-brown, the middle of each feather streaked with yellowish-white, surrounded, more or less, with black; sides the same, but have not so much of the white streaks; breast, light ferruginous-brown; shafts, white; belly, paler; wing coverts, pale Rufus-brown, streaked like the back, but more minutely; quills, dusky, the outer webs more or less mottled with yellowish-white; tail, dusky, tipped with white, and consists of twelve short feathers, hid by the coverts. The female differs, in having no black chin or throat, but only a dusky mark from the ears, passing downwards; the breast is also spotted with dusky, and the coverts of the wings crossed with yellowish-white bars, in other respects the sexes are alike. The legs of both are of a light yellowish brown. The quails known to us are universally diffused through Europe, Asia, and Africa, but not in America; they are birds of passage, and are seen in immense flocks traversing the Mediterranean Sea, from Europe to the shores of Africa, in the autumn, and returning again in the spring, frequently alighting in their passage on many of the islands of the Archipelago, which they almost cover with their numbers. On the western coast of the kingdom of Naples, such prodigious numbers have appeared, that an hundred thousand have been taken in a day, within the space of four or five miles. From these circumstances it appears highly probable that the quails which supplied the Israelites with food, during their journey through the wilderness, were sent thither on their passage to the north, by a wind from the south-west, sweeping over Egypt and Ethiopia, towards the shores of the Red Sea; several remain and breed with us, and are of a larger size than our migratory visitors. Bechstein, the German author, says, "Besides the beauty of form and plumage, the song of this bird is no slight recommendation to the amateur. In the breeding season, that of the male commences

by repeating, softly, tones resembling *verra, verra*, followed by the word *pievervie*, uttered in a bold tone, with the neck raised, the eyes shut, and the head inclined on one side; those who repeat the last syllable, ten or twelve times, consecutively, are the most esteemed; that of the female only consists of the syllables *verra, verra, pupu, pupu*, the two last syllables being those by which the male and female attract each other's attention. When alarmed or enraged, their cry resembles the word *quillah;* but at other times it is no more than a murmur. Quails never call when left to run about a light room, but in a darkened room or cage, they will often call during the whole night."



THE SOLITARY SNIPE AND WOODCOCK.

THE SOLITARY OR GREAT SNIPE,

Or, as it is sometimes called, the double snipe, is an autumnal visitor, and also during its spring return, to the northern regions,

where it breeds. It is found in Norway, Sweden, and Germany, and visits the south of Europe, and the borders of Asia. Unlike the common snipe, it is a bird of heavy and steady flight, and often becomes so fat, in the autumn, as to be scarcely capable of taking wing; its flesh is delicious. It is mostly found singly, occasionally in pairs, but, in some districts, is very abundant, affording excellent sport. They feed much on the larvæ and fly of the Harry longlegs. Their nest resembles the common snipe. In the great snipe, the tail is composed of sixteen feathers; middle of the first quill whitish; top of the head black, divided by a band of yellowish white; stripe above the eye yellowish white; upper parts variegated with black, and bright rusty; abdomen and sides striped with black bands, inclining to reddish, brown at the point; feet greenish-ash. Length twelve inches. Females larger than the males; weight from seven to nine ounces.

THE COMMON SNIPE

Is frequently found in our marshes and wet grounds, where they lie concealed in the rushes, &c. In the summer, they disperse to different parts, are found in the middle of our highest mountains, as well as our low moors. Their nest is made of dried grass; they lay four eggs, of a dirty olive colour, marked with dusky spots; their young are so often found, that it is certain they never entirely leave this country. When disturbed, in the breeding season, they soar to a vast height, making a singular, bleating noise, and when they descend, dart down with vast rapidity. Their food is the same with that of the woodcock, larvæ, slugs, insects, and worms; their flight very irregular and swift, and attended with a very shrill scream. They are most universal birds, being found in every quarter of the globe, and in all climates. They weigh about four ounces. The length, to the end of the tail, is nearly twelve inches, the breadth about fourteen; the bill is three inches long, of a dusky colour, flat at the end; the head is divided lengthways, with two black lines, and three of red, one of the last passing over the middle of the head, and one above each eye; between the bill and the eyes is a dusky hue; the chin is white; the neck is varied with brown and red; the scapulars are beautifully striped lengthways, with black and yellow; the quill feathers are dusky, but the edge of the first is white, as are the tips of the secondary feathers; the quill feathers next the back are barred with black and pale red; the breast and

belly are white; the coverts of the tail are long, and almost cover it; they are of a reddish-brown colour; the tail consists of fourteen feathers; black on their lower parts, then crossed with a broad bar of deep orange; another narrow one of black, and the ends white or pale orange; the vent feathers of a dull yellow; the legs pale green; the toes divided to their origin.

THE JACK SNIPE

Haunts the same places, and uses the same food as the preceding; it lies close, and is difficult to start; its flight is never distant, and more sluggish than the larger kind; its weight is less than two ounces; the length eight and a half inches; the bill is an inch and a half long; the crown of the head is black, tinged with rust-colour; over each eye is a yellow stroke; the neck varied with white, brown, and pale red. The scapular feathers are narrow, very long, brown, and bordered with yellow; the rump a glossy, bluish purple; the belly and vent white; the greater quill feathers dusky; the tail brown, edged with tawny, consisting of twelve pointed feathers; the legs are of a cinerous green.

SABINE'S SNIPE.

This late addition to our British Fauna, is about nine inches and a half in length; bill two inches and three quarters, of a brownish black colour; the upper mandible inclining to chesnut at the base; tarsi an inch and a quarter; the plumage brownish black; the margin of the feathers chesnut, dusky on the back; tail feathers black at the base, with ferruginous bands towards the tip. The absence of white, and the stripes of ferruginous yellow, so common to the other species, are a strong distinguishing character in this variety. Since the first record of one of those birds being added to the collection of the late Mr. Vigors, M.P., for Carlow, several have been shot—one by Captain Williams, Comptroller, Dublin Castle; one by Colonel Wingfield, at Tollymore Park, county Down; and several by Edward Burton, Esq., at Clifden, Currafin.

Snipe-shooting, when the birds are plenty, affords very excellent sport, it being allowed to be the pleasantest, on account of the quick succession of shots; this is also the best shooting for practice, seldom failing to make indifferent shots, most excellent

ones. There is no shooting that presents such a variety of shots, scarcely any two being alike. These birds usually fly against the wind; therefore, every snipe-shooter should walk down it, as by that means the bird, if it rises before him, will fly back, and, coming round him, describe a kind of circle; or at least his flight, for a certain distance, will not lengthen the shot, allowing him a certain time to cover the bird, and take good aim; for if he gets up before him, and should by chance go down the wind, or from him, it is then the most difficult shot. It will be proper, in this case, to let the bird get a little distance from him, as then he will fly steadier, and the slightest grain will fetch him to the ground.

Pointers are made use of by many, in shooting this bird, and what is very singular, although these birds are so diminutive, in comparison with the game, which pointers are accustomed to, yet they will stand equally staunch to them, even to the jack-snipe, which is the smallest of these birds. If you use the pointer, it should be a very old, staunch one: a young pointer will be too quick, and will be spoiled as to other game. When these birds are very plenty, the snipe-shooters never make use of a dog, as they always walk them up, which is found to answer best, and afford the most sport. The jack-snipe, or jud-cock, is esteemed the most difficult shot, although he seldom, on rising, makes any twistings or turnings, and will alight and pitch again, after being fired at, within a couple of hundred yards, and will suffer himself to be fired at twenty times in the same field, and will each time pitch close to the shooter. In Ireland, in the bottoms of the county of Limerick, near Charleville, these birds are in the greatest abundance; it is not uncommon to hear of a person shooting twenty brace of them in the morning. The late Sir George Dunbar, of the 14th Regiment of Light Dragoons, when quartered at Charleville, won a considerable wager, by shooting forty-three brace, between ten o'clock in the morning and four in the afternoon; and what appears still more extraordinary is, that although there are so many sportsmen about the place, who follow these birds, and others who net them, yet you will find always enough of sport the day following, for there seems to be as many snipes, after two months' destruction, as there were at the beginning of the season. The county of Cork is likewise celebrated for its number of snipe.

THE WOODCOCK

Is a native of the northern latitudes of Europe and Asia; its migratory range is very extensive, extending to Italy, Madeira, Barbary, Greece, Aleppo, and Egypt; it has been noticed in Cashmere and Japan. It breeds in Russia, Finland, Norway, Sweden, Siberia, &c., and also in Great Britain; in Ireland, the young have been found in the counties of Wicklow, Wexford, Carlow, Queen's County, Down, and Antrim; and young birds have lately been in the possession of Lord De Vesci, Lord Roden, Colonel Graves, and Mr. Alcock, of Wilton, county Wexford. The female builds a rude nest, on the ground, and generally lays four or five eggs, larger than those of a pigeon, of a rusty gray colour; the young leave the nest as soon as they are freed from the shell, attended by the parent birds, until they can provide for themselves; if a brood is disturbed, and cannot fly, the old birds take the young ones separately between their feet, and fly from the dogs, with a moaning cry.

The first flight of woodcocks from the north to our island, generally occurs towards the end of September or beginning of October; but these flocks, after remaining a short time, wing their way to the more southern regions of Europe and northern Africa, a few stragglers only remaining behind, which are afterwards joined by other arrivals during the latter part of October, November, and December. They generally come over in hazy weather, with little wind, and that blowing from the north-east. Their favourite haunts are woods, moist thickets, close breaks, glens, and similar places, where they remain concealed during the day; but as soon as darkness sets in, they leave their retreats, and scatter themselves over moist meadows and swampy, open grounds, where they search for food—namely, slugs, insects, and especially worms, thrusting their bill into the earth, and drawing forth their prey. They move northward the latter end of February. They have been known to settle on ships at sea, and are particularly attracted by a glare of light: instances have occurred at the Cromer and Eddiston light-houses of their falling victims to it; at the light-house upon the hill of Howth, county Dublin, the lamp-trimmer was surprised by a violent stroke against the windows, which broke a pane of plate-glass, more than an eighth of an inch in thickness. On examining the balcony that surrounded the light, he found a woodcock, which had flown with such violence as to break his bill, head, breast-bone,

and both wings. The man had often found birds which had killed themselves by flying against the windows, but never before knew of the glass to be injured. On their first arrival they are commonly poor, as if wasted by their long journey. In 1796, Mr. Yea, of Swansea, killed one hundred couple of woodcocks in one season. In Ireland, the Earl of Claremont, shot half as many in a day. They are so abundant, that they have been sold, near Ballyshannon, in the county Donegal, for one penny each. They have been successfully bred in captivity, but it is most difficult to supply them, in sufficient quantity, with their favourite food, their digestion being most rapid. The weight of the woodcock is usually about twelve ounces, the length near fourteen inches, the breadth twenty-six. The bill is three inches long, dusky towards the end, reddish at the base; the tongue slender, long, sharp, and hard at the point; the eyes large, and placed near the top of the head, that they may not be injured when the bird thrusts his bill into the ground; from the bill to the eyes is a black line; the forehead is of a reddish-ash colour, the crown of the head, the hind part of the neck, the back, the coverts of the wings, and the scapulars are prettily barred with a ferruginous red, black, and gray, but on the head the black predominates; the quill feathers are dusky, indented with red marks; the chin is of a pale yellow, the whole underside of the body is of a dirty white, marked with numerous transverse lines of a dusky colour; the tail consists of twelve feathers, dusky or black on the one web, and marked with red on the other; the hips above are ash-coloured, below white; the legs and toes are livid, the latter divided almost to their origin, having only a very small web between the middle and interior toes, as are those of the different species of snipe found in Great Britain. They sometimes vary in colour—fawn-coloured and white are not unfrequent.

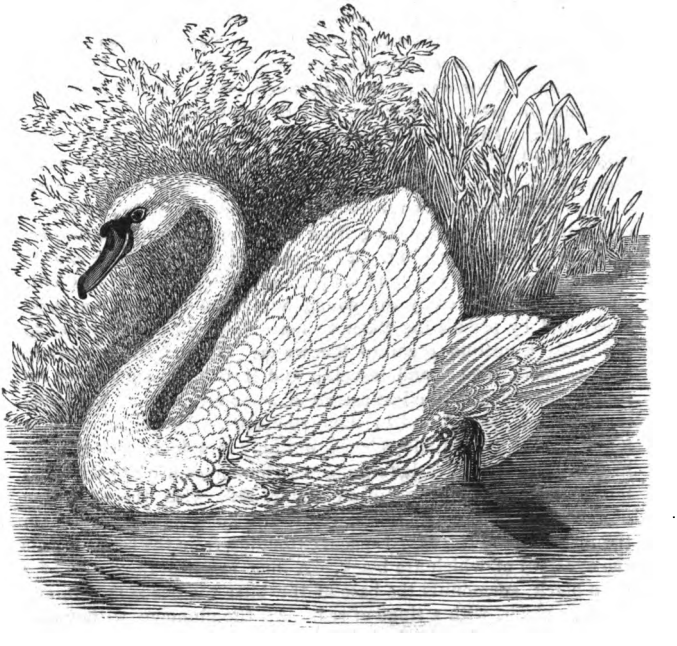
Small spaniels are used for cock-shooting, called cockers or springers; they give notice by barking when the bird rises.

Having disposed of the game-birds, I shall next endeavour to describe our various water-fowl, known as British birds.

CHAPTER VII.

AQUATIC FOWL.

"Amusive birds! say where your hid retreat
When the frost rages, and the tempests beat;
Whence your return, by such nice instinct led,
When spring, sweet season, lifts her blooming head?
Such baffled searches mock man's prying pride,
And GOD of NATURE is your secret guide!"



THE TAME OR MUTE SWAN,

From its magnificent appearance on the water, has, from an early period, been held in the highest estimation. In the reign of

Edward IV., it was enacted, that no "person who did not possess a freehold of a clear, yearly value of five marks," was permitted to keep any.

Nothing can exceed the beauty and elegance with which the swan rows itself along the water, throwing itself into the proudest attitudes imaginable before the spectators; and there is not, perhaps, in all nature, a more lively or striking image of dignity and grace. In the exhibition of its form, we see no broken or harsh lines, no constrained or abrupt motions, but the roundest contour; the eye wanders over every part with pleasure, and every part takes new grace and new postures. It, however, appears rather inelegant on land. They are powerful birds, and defend their eggs and young with much avidity. A female perceiving a fox swimming towards her nest, darted into the water, and succeeded in drowning him, and returned to her nest in triumph. The flesh of the young birds was formerly in much esteem, but the old are hard and ill-tasted. They are said to live to the age of an hundred years. Their nest is made of grass, among reeds: in February they begin to lay, depositing an egg every other day until there are six or eight. These occupy six weeks in hatching. Two females have been known to associate for years together, hatching and bringing up their young from the same nest, and sitting by turns, without quarrelling. The penalty for taking their eggs is imprisonment for a year and a day, and a fine at the King's will. They occasionally carry the young ones from the nest on their back, and by permitting them to leave their situation there, to gradually accustom them to the water. They feed on aquatic plants, roots, frogs, and insects; and it is said, sometimes on fishes. The fact of the last assertion, some are inclined to doubt, none having been found in their stomachs. The mute swan is found wild in Russia and Siberia, but only in a domesticated state in Great Britain. Its distinguishing characters are chiefly in its bill, which is throughout of an orange red, with the exception of the edges of the mandibles, the slight hook at the extremity, the nostrils, and the naked spaces extending from the base towards the eyes, all of which are black. A long protuberance, also of a deep black, surmounts the base of the bill; the iris is brown, and the legs black, with a tinge of red. All the plumage, without exception, in the adult birds, is of the purest white. In length, the full-grown male measures upwards of five feet, and more than eight in the expanse of its wings, which reach, when closed, along two-thirds of the tail. Its weight is usually about twenty pounds, but it sometimes attains five-and-twenty or thirty; and those in-

habiting the Caspian Sea are said to reach a still greater size The female is rather smaller than the male, her bill surmounted with a smaller protuberance, and her neck more slender. When first hatched, the young are of a dusky gray.

The wild birds of this species are migratory; they absent themselves in October, and return in March. The tame swans on our waters thrive best by allowing them to remain on the water during the winter. I would recommend their being pinioned, an operation which I have frequently and successfully performed. The operation is simple: find the joint of the bastard wing, which usually contains about five of the flight feathers; introduce a sharp knife between the joint, and take it clean off; or, if you have not sufficient nerve to use the knife, take a broad, well-sharped chisel, introduce it between the bones, at the joint, and, with one blow of a mallet, you will separate it without injury, dividing the skin with your knife. If you operate with violence and fracture the bone, the chance is that mortification sets in, and destroys your bird. Swans are abundant on the Thames; our beloved Queen, Victoria, had, at the last swan voyage, 232 birds on that river; the various companies have, likewise, their swans there, each having their distinguishing marks.

THE HOOPER, OR WHISTLING SWAN,

Differs in many important anatomical details, from the tame swan; is a native of nearly the whole of the northern hemisphere, as far as Europe and Asia extend. It is a migratory bird, and resides during the summer within the regions of the artic circle, where it breeds in great numbers. It has been known to incubate and rear its young in the Shetland and Orkney Islands. On the approach of winter, this bird leaves the north for more southern latitudes, visiting the British Islands, Holland, Germany, France, and Italy, as far as northern Africa and Egypt. It travels with rapidity, at a great elevation, their numbers forming the figure of a wedge. The note while on the wing, is harsh, and resembles the word *hoop*, repeated several times, but, from its elevation, has rather a musical sound, as the trachea, or windpipe, is considerably lengthened down the keel of the breast-bone. Wide morasses, lakes, on the mouths of rivers, and inundated grounds, are the abodes of this wary bird.

On the approach of spring, such of them as have visited us, collect and return to their breeding haunts in Norway, Iceland, Lapland, Spitzbergen, and Siberia. The down of this species is

very valuable, and is procured in great quantity by the Icelanders. In the month of August, when the old birds have cast their quill feathers and are unable to fly, the natives, attended by dogs, and mounted on horses, ride them down or take them by the dogs. In swimming it is never seen to throw up the plumes of its wings, or assume any striking attitude; and it carries its neck erect and straight, instead of curved; but while walking its head is lowered. In captivity it soon becomes tame, and has bred in England. It has no basal protuberance on the upper mandible; the cere, as far as the eye, is yellow, as is also the back part of the lower mandible; the point as far as the nostrils, black—these two colours meet each other obliquely, the yellow advancing forward along the sides of the beak; iris brown, feet black. Expanse of the wings, about eight feet.

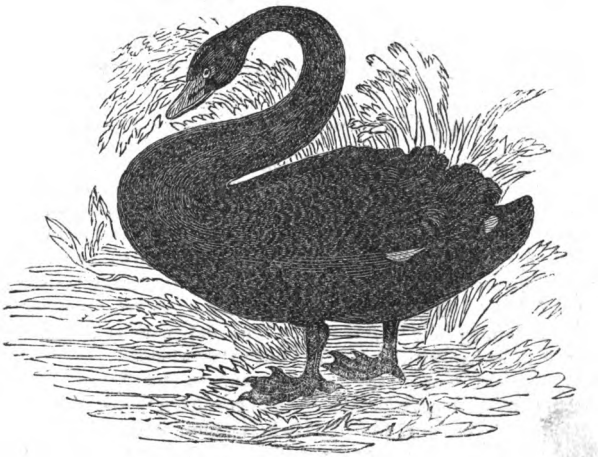
THE BEWICK SWAN

Is about one-third less than the hooper; its beak rises high at the base, which is yellow; the anterior portion, including more than the nostrils, black; the tail feathers are eighteen, in the hooper twenty; the legs are of a deeper black than the hooper, and the neck is more slender. The arrangement of the trachea is very different. The tube of the windpipe is of equal diameter throughout, and descending in part of the neck, enters the keel of the sternum, which is hollow, as in the hooper, traversing the whole length. Having arrived at the end of the keel, the tube, then gradually inclining upwards and outwards, passes into a cavity in the sternum, destined to receive it, caused by a separation of the plates of bone, forming the breast-bone, and producing a convex protuberance of the inner surface. This swan is a native of the northern regions of Europe and Asia, as well as America; it breeds in Iceland, and within the artic circle, migrating southwards in spring; it appears to be much scarcer than the hooper. The nest is large and deep; its cry is loud; in captivity its note is a low-toned whistle; its voice is much weaker than the preceding species. There has been a fine specimen of this swan for some years in our Dublin Zoological Gardens.

THE POLISH SWAN

Has been confounded with the tame swan, to which, of all the European swans, it is most nearly related. There are, however, many important anatomical differences, especially as to the head.

The cygnets are white, a point in which it differs from every other species of white swan. In the adult bird the beak is reddish orange; the lateral margins, the nail, the nostrils, and the base of the upper mandible are black. There is a small tubercle, which never acquires the size of that ornamenting the head of the tame swan. Legs, toes, and intervening membranes, slate gray. The windpipe is simple. This bird, a native of the highest northern regions, and the Baltic, is called by dealers, the Polish swan, and occasionally visits our island. It is easily reconciled to captivity, breeding as freely as the common tame swan. The female of a pair of those swans, at Lord Derby's seat, at Knowsley, having died, the male paired with the female of the tame species, and a brood was the result; but the hybrids, though old enough, neither paired amongst themselves, nor with any of the tame swans on the same water. The late Rev. Mr. Walker, of Raheny, county Dublin, bred them on his lake as readily as the common species.



THE BLACK SWAN

Is a native of Australia, where it abounds on the rivers and lakes, and in various islands along the coast, and is usually seen in flocks, which are shy and wary. Its first introduction into Europe has been noticed in 1726, two living specimens having been brought

to Batavia. Of late years this beautiful bird has been introduced more abundantly here, where it thrives, and breeds twice in the year; and there is no doubt of its soon becoming almost as common as the tame swan.

The black swan is inferior in size to the hooper; its plumage black, with the exception of the primary, and a few of the secondary quill feathers, which are white; but these are obscured by the curled secondaries, which hang, plume-like, over them. The bill is of a bright red colour, crossed near the nail by a whitish band; its base, in the male, is surmounted by a slight protuberance, which is wanting in the female, underpart of the bill grayish white; legs and feet of a dull ash colour; iris red; trachea perfectly simple, not unlike that of the common swan. The note of this species is harsh. They are generally seen in flocks of eight or nine together, floating on a lake, and when disturbed, flying off like wild geese, in a direct line one after another.

There is a very beautiful swan on the coast of South America, distinguished by a jet black head and neck, contrasting admirably with the snowy whiteness of the rest of the plumage. The bill is red, the legs and feet flesh-colour. It equals the hooper in size, and, if alive in Britain, is only to be found at Knowsley.

GRAY-LAG GOOSE, OR GRAY-LEGGED GOOSE.

To the above I give precedence, being said to be the progenitor of all our domestic geese—a circumstance to which I cannot entirely accede, my opinion being, that our domestic goose is made up of gray-lag, white-fronted goose, bean goose, and pink-footed goose, to each of which they occasionally show an affinity; however, this is a question for ornithologists. The gray-lag is the largest and finest of our wild geese, and was, at one time, abundant in England and Ireland, where it bred in the fens and morasses, but now, if at all to be had with us, is one of our rarest visitors. I had a very fine, healthy pair of them, which came to me, from one of the islands in the Pacific Ocean. I had permission to keep them at the Zoological Gardens, Phœnix Park, Dublin, from whence it was said the female flew away; the male bird is still in the possession of A. Whyte Baker, Esq., County Kilkenny. They weigh about ten pounds, and measure two feet nine inches in length, and five in breadth. The bill is thick at the base, tapers towards the top, and is of a yellowish-red colour, with the nail white; the head and neck are of a cinerous brown, tinged with dull yellow, and, from the separation of the feathers, the latter appears striped

downwards; the upper part of the plumage is of a deep brown, mixed with ash-gray; each feather is lighter on the edges, and the less coverts are tipped with white; the shafts of the primary quills are white, the webs gray, and the tops black; the secondaries black, edged with white; the breast and belly are crossed and clouded with dusky and ash, on a whitish ground, and the tail-coverts and vent are of a snowy whiteness; the middle feathers of the tail are dusky, tipped with white, those adjoining more deeply tipped, and the exterior are nearly all white; legs, pale red. When they bred in the fens, the flesh of their young was preferred to that of our domestic geese, but population and cultivation have driven them entirely from our shores.

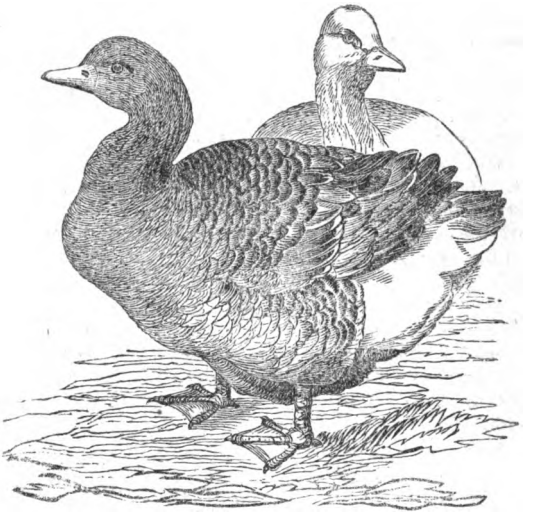
THE DOMESTIC GOOSE

Is the next I shall take in order, as springing from the above, and introduce a recent importation from the Mediterranean, which bids fair to be the favourite of our farm-yards, from its extraordinary size, fine flavour, and inclination to put up flesh; it is

THE TOULOUSE GOOSE.

The annexed print has been copied from the *Illustrated London News*, of 21st June, 1845, drawn for that publication, from my birds; it makes a record of their having twice taken the prize in London, in competition with all England, Ireland, and Scotland.

Some fine specimens of these birds have been recently introduced by the Earl of Derby, and is indiscriminately known as the Mediterranean, Pyrenean, or Toulouse goose, and from size and quality of flesh, found a most valuable addition to our stock. I have been fortunately favoured with a few specimens, and have successfully bred them, and forwarded the above pair to the London Zoological Society's show, in 1845, to which was awarded their first premium. They were sold to Lord Saye and Sele. In 1846, I again forwarded a pair for exhibition, and again took the London prize, and sold them to his Highness Ibrahim Pacha, who thought them worthy of being carried with him to Egypt. With the exception of their great size, they resemble our common domestic geese, but of a much more mild and easy disposition; and what is most important to the farmer, they never pull the stacks, in a haggard. Their prevailing colour is a blue gray, marked with brown bars; the head, neck (as far as the beginning of the breast), and the back of the neck, as far as the shoulders, of a



THE TOULOUSE GOOSE.

dark-brown; the breast is slaty-blue; the belly is white, as also the under surface of the tail; the bill is orange-red, and the feet are flesh-coloured. The London Zoological Society have pronounced them to be the unmixed descendant of the gray-lag; these birds have likewise been successful competitors, wherever shown in Ireland. It may be well to remark, that the abdominal pouch, which, in other geese, is an indication of old age, exists in them from the shell. Their flesh is tender and well-flavoured. It is quite certain that their cross on our domestic goose, would be found a most valuable acquisition.

There are two prevailing colours amongst our domestic geese, white and gray. We have a large, white variety, usually termed Embden geese, which are very superior, from their extra size, and additional value of the feathers. If you wish a gray goose, by all means cross with the Toulouse, than which nothing can be finer. One gander is sufficient for five or six geese; the goose lays from ten to twenty eggs at one laying; but by removing the eggs as fast as they are laid, and feeding her well, you may increase her

laying to fifty eggs. If well cared, you may have three clutches in the year. The care necessary, is good housing and feeding.

You will readily perceive when a goose is about to lay: she carries straw to make a nest; when that is observed, she should be confined, lest she lay out. If you induce her, by confinement, to lay her first egg in any particular place, she will be sure to deposit the remainder of her clutch in the same nest. Her inclination to hatch is indicated by her remaining in the nest longer than usual after laying. The nest to be of straw, with a finer lining, say dry hay, or moss, and be sure it is sufficiently deep to prevent the eggs rolling out. About fifteen eggs is thought a sufficient clutch. The less the goose and her eggs are tampered with the better; she sits from twenty-seven to thirty days. The gander never molests her on the nest, but acts as a sentinel to repel intruders. It will be necessary to see that the goose be fed while hatching, as, if she find a difficulty in providing food, she may be kept too long off her nest, and perhaps at length desert it. The goslings will not require food for twelve hours after leaving the shell; their food may be bread, soaked in milk, porridge, curds, boiled greens, or bran, mixed with boiled potatoes, given warm, but not hot. Do not allow them to be subject to rain, or cold wind; keep them for at least forty-eight hours, after hatching, from the water, which would be likely to bring on cramps. Geese do much better where they have access to water, and, from feeding on aquatic plants, the expense of keeping is comparatively light. Although so fond of water, if you wish to keep your geese well, you will have to house and bed them at night, clean, dry, and comfortably. Grass is essential to the well-keeping of geese, their favourite being the long, coarse, rank grass, rejected by cattle, of which little use could otherwise be made, and therefore, through the goose, is turned to profit. The stubble geese are long in estimation, from feeding on the dropped corn, and various herbage, amongst the stubbles. The goose is easily kept, but if intended for market, they require, in addition to green food, some boiled potatoes, mixed with bran, given warm, but not hot; and will be found a profitable portion of the farming stock. To fatten goslings for market, give potatoes, or turnips, bruised with barley or oatmeal, at least twice a day.

Mr. Cobbett says, the refuse of a market garden, would maintain a great many geese, at a very small cost, but, in addition to the green food, they would require boiled or steamed potatoes, given warm; or oatmeal, peas, beans, or maize, beat up with boiled potatoes, carrots, or turnips. An objection has been made

to the droppings of the goose on the farm, which, though acrid, when fresh, when mellower will much enrich the soil.

Buckwheat, or ground oats, mashed up with potatoes, and given warm, to geese, after being cooped in a dark, quiet, cool place, will render them fat in three weeks: cleanliness is essential.

I am sorry to record the barbarity of plucking the geese, which is practised in Cumberland, Lincolnshire, and some parts of Ireland. In few countries do the value of geese appear to be fully appreciated, for, with proper management, few animals are of greater worth. If we consider that these birds, not only afford us a wholesome but a delicate food, their smaller feathers and down, contribute so largely to our nightly repose, their quills, so common in use, for transmitting our thoughts to the present and future ages—we may truly estimate their intrinsic value as little inferior to the sheep; for the feathers of the goose is equally valuable with the wool, and the flesh is eagerly sought after. Upon the whole, a goose is a highly profitable animal, little inferior to that of a sheep in certain situations, and thousands are annually bred where that animal could not exist. If the produce of the feathers—plucked three times a year, and the quills twice, and that, upon an average, each goose produces six or seven young for the market, annually—are considered, how much short they are of the profit yielded by a ewe, in the same time, I shall leave to the calculation of the agriculturist. In most parts of the kingdom, the goose is an appendage to the farm-yard; and being a hardy bird, and subject to few diseases, requires no care, and is neither fed with hay nor corn, consequently her value is clear profit.

THE CANADIAN GOOSE,

Having so commonly bred in Great Britain, in captivity, and being frequently shot, whether as an occasional visitor, or as an escaped bird from an enclosure, has not been ascertained; however, it is likely to become a native, and, therefore, a description is necessary to my arrangement. Ornithologists place this bird as a link between the swan and the goose, from the neck being more elongated than in the goose, and not so much so as in the swan. The length of this species is three feet, extent five feet two inches; the bill is black; irides, dark hazel; upper half of the neck, black, marked on the chin and lower part of the head with a large patch of white, its distinguishing character; lower part of the neck, before, white; back and wing coverts

THE CANADIAN GOOSE.

brown, each feather tipped with whitish; rump and tail black; tail coverts and vent white; primaries black, reaching to the extremity of the tail; sides, pale ashy-brown; legs and feet blackish-ash. The male and female are exactly alike in plumage. Bewick says, it is as familiar, breeds as freely, and is, in every respect, as valuable as the common goose, and it is more ornamental.

In their spring and autumnal migrations, they are well known to the inhabitants of the interior, as well as the coast and great lakes of America, from the lowest latitudes of the United States, and have been seen as far north as has yet been approached by our most intrepid navigators, and were then pursuing their journey farther northward. The English, at Hudson's Bay, depend greatly on geese; and, in favourable years, kill three or four thousand, and barrel them up for use. In a good day, a single Indian, will kill two hundred. The autumnal flight lasts from the middle of August to the middle of October. The feathers are an article of commerce, and are sent to England. The vernal flight lasts from

the middle of April until the middle of May. Their food is tender, aquatic herbage, and a marine plant, called sea-cabbage, together with grain and berries. They swim well, and if winged, dive and go a good way under water. Their flight is heavy and laborious, generally in a straight line, or in two lines approximating to a point, thus, >: in both cases, the van is led by an old gander, who, every now and then, pipes his well-known *honk*, as if to ask how they come on, and the *honk* of "all's well" is generally returned by some of the party. Their course is in a straight line, with the exception of the undulations of their flight. When bewildered, in foggy weather, they appear sometimes to be in great distress, flying about in an irregular manner, and for a considerable time, over the same quarter, making a great clamour, during which the inhabitants deal death and destruction amongst them. The wounded birds are easily domesticated, and readily pair with the tame gray goose, and their offspring are found to be larger than either, but the markings of the wild goose predominate.

On the approach of spring the domesticated birds, from the wild stock, discover symptoms of great uneasiness, frequently looking up into the air, and attempting to go off. The gunners take one or two of these domesticated geese with them, to those parts of the marches, over which the wild ones are accustomed to fly; and concealing themselves within gunshot, wait for a flight, which is no sooner perceived by the decoy geese, than they begin calling aloud, until the whole flock approaches so near, as to give the gunner an opportunity of discharging two, or sometimes three loaded muskets among it, by which great havoc is made. They weigh from ten to fourteen pounds, and are sold in the Philadelphia market, at from seventy-five cents to one dollar, and are estimated to yield half a pound of feathers each, which produces twenty-five or thirty cents more. Buffon says many hundreds of these birds inhabit the great canal at Versailles, where they breed familiarly, and also decorate the charming gardens of Chantilly. Our London Zoological Society, Regent's Park, is in possession of some fine specimens, as well as the Ornithological Society of St. James's Park, in both of which places they have bred. The Earl of Derby has bred them, at Knowsley, and has produced an hybrid variety, between them and the barnacle goose, some fine specimens of which he has presented to the Royal Zoological Society, Phœnix Park, Dublin. They have been bred in a domestic state on several lakes in Ireland, and have been frequently shot in a wild state. As all animals degenerate from close breeding, and as there is a difficulty in procuring the gray-lag, it might be judi-

cious to introduce the Canadian goose, as a cross on our domestic variety.

THE BEAN GOOSE

Is less than the gray-lag, the weight being only from five to upwards of seven pounds; length from two feet and a half to three feet; is a frequent winter visitor to all the British Isles, where they find feeding in the pasture fields and early wheat. They are known to breed in the Hebrides, and the northern counties of Scotland, and are abundant in Ireland, in the winter. They have bred in the collection of the Ornithological Society of London. The length of this species is two feet seven inches; the extent four feet eleven; the bill, which is the chief specific distinction, between this and the gray-lag, is small, much compressed near the end, whitish and sometimes pale red in the middle, and bluish at the nail and end of the lower mandible; the base (in the male) is bounded by a narrow bed of white feathers, the head and neck are cinerous brown, tinged with ferruginous; the breast and belly dirty white, clouded with cinerous; the sides and scapulars dark-ash colour, edged with white or rust colour; the back the same; the coverts of the tail white; the lesser coverts of the wings light gray, nearly white, the middle of a deeper gray, tipt with white; the primaries and secondaries gray, tipt with black; the feet and legs saffron colour, the claws black.

During the day, the flocks resort to the upland grounds and open lands, feeding on the tender wheat, and also upon clover and other herbage. In the early part of the spring they visit the fields, newly sown with beans and peas, and greedily devour as much as they find scattered about, or can dislodge. On the approach of evening they retire to the water, or some bar of sand, at a little distance from the shore, where they have a free range of vision all around, and no enemy can steal, unobserved upon them. They are extremely watchful and vigilant, and it is only by stratagem that the sportsman can come upon them within gunshot. The best plan is to lie in wait for them where they make their early morning visit to the feeding-grounds, which they habitually frequent.

THE EGYPTIAN OR CAPE GOOSE,

Is easily kept and reared in confinement; has been frequently shot in the vicinity of artificial waters, and is supposed to have

THE EGYPTIAN OR CAPE GOOSE.

escaped from captivity; but when we consider that flocks of eighty have been seen in Hampshire, that they are frequently met with in both England, Ireland, and Scotland, we must conclude them to be African visitors. Northern Africa is their natural station. They spread over the northern half of that continent, and are abundant along the banks of the Nile; visits the southern shores of Europe, and are frequently found in Sicily. They were a part of the hieroglyphics of the Egyptians, and a favourite article of food, for the priests, and their eggs considered of delicious flavour. Their beautiful appearance adds considerably to ornamental sheets of water, where they breed readily, and the young when fledged, often take wing, and are frequently shot. The habits of this goose closely resemble the rest of the tribe. The bill is long, slender, and nearly straight, rounded at the top; the upper mandible is slightly curved, and the nail hooked; the base of the bill, and a space surrounding the eyes is chesnut brown. The cheeks, crown, chin, and throat, yellowish white; the neck

is yellowish brown, paler on the forepart, and on the back reddish brown; the upper part of the back, the breast, and flanks, pale yellowish brown, minutely waved with a darker tint; centre of the breast and belly nearly white, with a patch of chesnut brown, where these parts may be said to join; vent and under tail coverts buff-orange; the lower back, rump, upper tail coverts, and tail, black; wings, as far as the greater coverts, pure white, the latter having a deep, black bar near their tip; the scapulars and tertials chesnut red, grayish brown on the inner webs; secondaries black at the tips, and, with the outer webs, brilliant, varying green; quills black; carpal joint, with a prominent tubercle. They become pugnacious at the breeding season; I would advise, at that time, their separation from other water-fowl.

THE WHITE-FRONTED GOOSE,

Or laughing goose of some authors, is the nearest approach to the gray-lag, and bean goose, and is a common winter visitant in the British Islands. It is found more inland than the preceding, feeding on young grains or grasses, and frequently found in turnip fields. They inhabit both Europe and America; are not shy; appear in flocks of thirty or forty, and are considered delicious eating. The principal distinguishing markings are the forehead, or the base of the bill, yellowish white, separated from the colour of the head by a darker line, which gradually shades into it. The bill is pale, and the nail white.

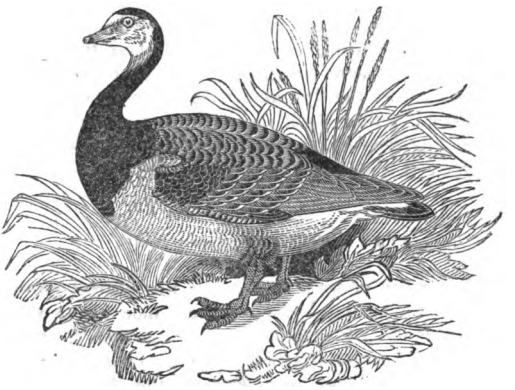
THE PINK-FOOTED GOOSE

Is so like the preceding, that it has been confounded with them, until Mr. Bartlet exhibited specimens to the London Zoological Society, in 1839, and pointed out the distinctions between it and the preceding species. Living specimens are at present in the possession of both the Zoological and Ornithological Societies. It has been shot in Ireland.

THE RED-BREASTED GOOSE

Is considered a rare variety of the British geese. The principal distinguishing characters are, list down back of the neck, chin, throat, and band extending upward to the eye, black; between the bill and the eye is a large spot of white; behind the eye, and

surrounding is a large patch of orange brown; front of the lower part of the neck and breast fine orange brown—the latter margined with a list of black and another of white; bill reddish brown, with the nail black; legs blackish brown, with a reddish tinge.



THE BERNICLE GOOSE

Is a native of the high northern latitudes, of both Europe and America, and, in autumn, migrates southwards. They visit our islands during the winter, and resort to the western shores of Britain, and the north of Ireland, and are abundant on the coast of Lancashire and in the Solway Frith. They are shy and wary, and can only be approached by means of the most cautious manœuvres. They frequent marshy ground, covered with spring tides, feeding upon sea-shore grasses, the fronds of various algæ, and particularly of the laver, or sloak.

The Bernicle breeds in Iceland, Spitzbergen, Greenland, Lapland, the north of Russia, and of Asia, and the neighbourhood of Hudson's Bay. It is of handsome form, and, from the length of the tarsi, stands high on the limbs. Its flesh is most excellent.

It is a singular fact, that, in the early ages, men of learning and science, disseminated the absurd idea, that those geese were produced from trees, growing on the Orkney Islands. From the ends of the branches, were small-swelled balls, containing the embryo of the goose, suspended by the bill, and when ripe, fell

off into the sea, and took wing; others affirm that they are produced in the form of worms, in the substance of old trees, or timber floating in the sea.

We need not suppose that there were none who doubted this marvel. Belan, who wrote in 1550, and others, treated it with ridicule; and in Ray's "Willoughby," published in 1678, we find a refutation of it, only with an admission of spontaneous generation, among certain animals, of the lower order.

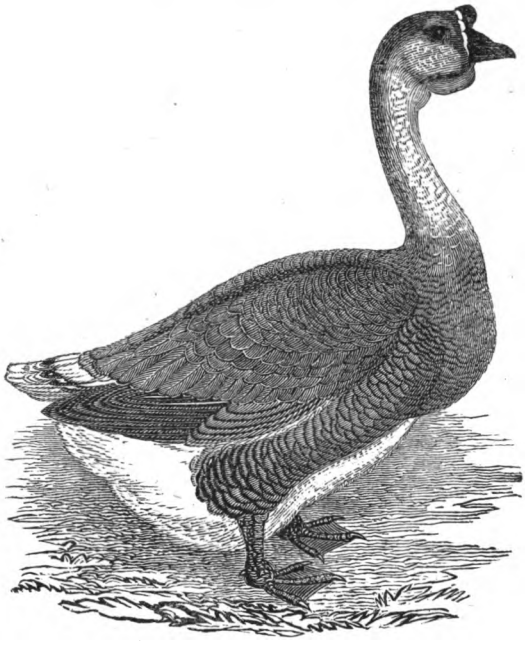
Its weight is about four pounds. The bill is black, with a reddish streak on each side; the cheeks and throat, with the exception of a black line from the eye to the beak, white; head, neck, and shoulders, black; upper plumage marbled with blue, gray, black, and white; tail black, under parts white; legs dusky. They are a maratime species, and seldom found inland, and in some seasons are so abundant in the north of Ireland as to darken the atmosphere, when removing from their quarters.

THE BRENT GOOSE,

Although of entirely different shape, standing, colour, size, and appearance, from the preceding, has been frequently confounded with it. It is much smaller than the Bernicle goose, stands low on the tarsi; the head, neck, and upper part of the breast, are dull black; on the sides of the neck, an interrupted patch of white; back, scapulars, rump, and under parts, anterior to the legs, clove-brown, paler on the latter, each feather having the tips and margins of a lighter shade; flank feathers tipped with white; vent, upper and under tail coverts, the latter exceeding the tail in length, pure white; tail, clove-brown; quills and secondaries blackish brown; bill, legs, and feet black. The sexes do not vary much in plumage.

It is a winter visitant, and most abundant on the eastern coast of England, and southern and eastern coast of Ireland. During ebb tide, they feed on marine plants. They are particularly wary. Colonel Hawker and other sportsmen, say, that night is the best time to shoot them, by lying in wait in the line of the flight, or by coasting in a punt. In Ireland, they furnish a considerable quantity of night shooting.

The geographical range of the Brent goose is northward. We have it in Shetland, and in northern Europe, Iceland, Hudson's Bay, Greenland, and Nova Zembla, where it is said to breed.



THE LARGE CHINESE, OR HONG KONG GOOSE,

Is, perhaps, the largest of the tribe, and has been but recently known here. They were first introduced by the Ornithological Society of London, from China, and are found unusually prolific, breeding at all seasons of the year, and cross with considerable advantage on our domestic goose. It is usual to have their young fit for the table at Christmas. As with all the Asiatic geese, they are furnished with the horny knot between the beak and forehead. Their prevailing colour is gray, with a longitudinal stripe of brown, running above the back of the neck, belly white, feet flesh colour. A bird somewhat resembling them has been long known to us as the Poland goose, but quite inferior in size and appearance.

THE WHITE CHINESE, OR SWAN GOOSE,

Is a beautiful variety, next in size to the above, and approaches nearest to the swan of any other goose. It is snow-white, knobbed on the beak, with orange legs, and truly ornamental on a sheet of water. They are just as hardy and prolific as the last variety, and their white plumage is well calculated to furnish up the downy couch.

THE BLACK-LEGGED CHINESE GOOSE,

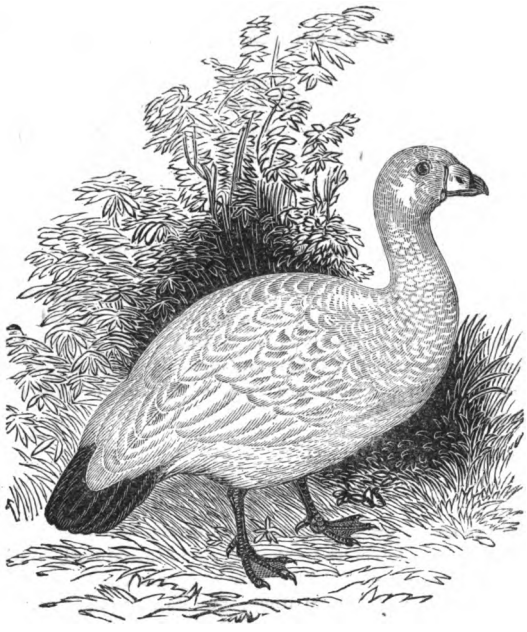
Is somewhat smaller than the preceding, the markings similar to those of the Hong Kong, the knob rather larger, in proportion to the size of the bird, its standing is more erect, and its legs and feet black, from which it takes its name. It makes a fine appearance on the water; but for use, or crossing, I should much prefer the large variety.

THE PIGMY CHINESE GOOSE,

Has all the character and appearance of the black-legged goose, but is, perhaps, one of the smallest geese introduced, in a living state, into this country. They are very rarely brought in; are about the size of the Rouen duck, but stand upright, and are a complete miniature of the black-legged goose, with the same horny protuberance between the beak and scull. I have had the skin of a goose from New South Wales, not so large as our teal, but have never heard of their being brought into Britain, in a living state. They would be a beautiful addition to our collection of water-fowl.

THE SPUR-WINGED GOOSE

Is a very rare visitor of Great Britain. It has an extraordinary, sharp, horny spur attached to the upper joint of the wing. It is a native of Africa, and much resembles a dark-coloured musk drake, with the red, fleshy knob about the head, but stands much higher on the legs. It has a fleshy protuberance between the base of the bill and the forehead, increasing in size according to age. A fine specimen has been for years in the Zoological Gardens, Phœnix Park, Dublin.



THE CEREOPSIS GOOSE

Is a late introduction, from New Holland. It has bred in the Great Park, at Windsor, and several specimens are now in possession of the London Zoological Society, as well as at Knowsley, the seat of the Earl of Derby. They are about the size of our common goose, which it nearly resembles in its general form. A broad patch on the top of the head is of a dull white, and the rest of the plumage of a dingy gray, deeper on the upper than on the under parts, having the extremity of each of the feathers of the back margined with a lighter band, and most of the wing coverts and secondary quill feathers marked with rounded, dusky spots; on the feathers of the back and shoulders, the spots are larger, assume an angular or semilunar form, and approach more nearly to the general colour of the plumage; the quill feathers, both of the wings and tail, are dusky black, throughout the greater part

of their extent; the naked extremity of the bill is black; the broadly-expanded cere, of a light straw or lemon colour; the irides light hazel; the naked part of the legs reddish orange; and the toes, together with their web and claws, and a streak passing from some little distance up the fore part of the leg, black. It is abundant in some parts of New Holland, and from its being so about Cape Barren, has obtained the name of Cape Barren goose. Cape Barren is one of the largest of Farneaux's group, in Bass's Strait. In a state of nature its manners and habits resemble the wild geese of the northern hemisphere, and is more or less migratory, being met with at particular seasons more abundantly than at others. It is by no means so wary as our northern geese, many, when first seen, having permitted themselves to be taken by the hand, and others knocked down with sticks, and some secured alive. The flesh is found to be excellent. It feeds, as our common variety, on grass and corn, and weighs from seven to ten pounds.

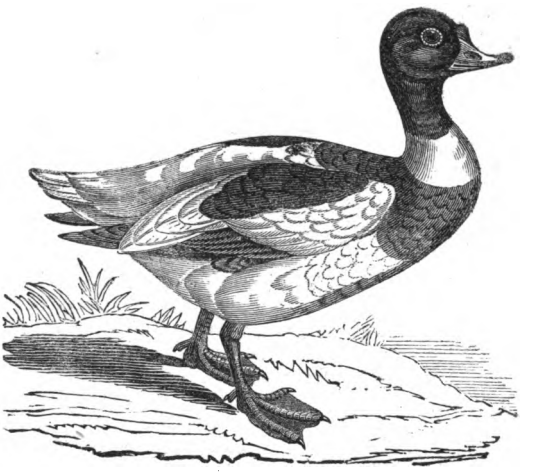
The sheildrake being a disputed point, between naturalists, as to its proper position, whether among the geese or ducks, I give it an intermediate place, as a link between both, after which I shall endeavour to describe the true ducks.

CHAPTER VIII.

DUCKS.

THE SHEILDRAKE, BARROW DUCK, SKEELING GOOSE,

Stands on disputed grounds, as to whether it should be classed with the geese or ducks, some asserting that the knob on the beak, entitles it to the first position, while others say the speculum or beauty-spot, on the wing, reduces it to the class of ducks; in either case, it is, perhaps, the most elegant of our water-fowl, being the most beautiful and clean-looking of the entire. The male bird weighs two pounds, ten ounces; the length is two feet; the breadth three and a half; the bill is of a bright red, and at the base swells into a knob, which is most conspicuous in the spring; the head and upper part of the neck, are of a fine, blackish green; the lower part of the neck white; the breast and upper part of the back are surmounted with a broad band of bright, orange-bay; the coverts of the wings, and the middle of the back



THE SHELDRAKE.

are white; the nearest scapulars black, the others white; the greater quill feathers are black; the exterior webs of the next are a fine green, and those of the three succeeding orange; the coverts of the tail are white; the tail itself of the same colour, and except the two outmost feathers, tipt with black; the belly white, divided lengthways by a black line; the legs of a pale flesh-colour. They are natives of northern Europe and Asia, and are found in Japan. It may be classed with the indigenous birds of Great Britain, as it breeds on various parts of our coast, and may be seen at all seasons of the year, but usually near the sea, and more numerous in winter. This species selects rabbit-warrens along the coast, as its breeding place, and, taking up a deserted burrow, there makes a nest of dried grass, lined with soft down plucked from its own breast. The nest is sometimes ten or twelve feet from the entrance; but where there are no burrows accessible, it is placed in a fissure of a rock or bank; the eggs are ten or twelve in number, and of a pure white. During the period of incubation (thirty days) the male keeps watch, and takes the place of the female, when she leaves the nest for food, and the young are sometimes carried in the bill of the parent, to the sea. They arrive at their usual haunts about the beginning of March; after the young become fledged, they keep to the

open sea, and desert their breeding ground, about the middle of September. They are found in all parts of England and Ireland, where the localities favour their breeding, and range to the very north of Scotland, and to Orkney, and are found on most of the shores of Europe. They are easily kept in confinement, where they have access to water, and form a very handsome ornament, but they do not breed freely under restraint. Both the Horticultural and Zoological Societies have bred them, and Mr. Trumble, of county Dublin, has been a successful breeder of them for many years. The young birds have not the bright colour, or decided markings of the old; the chestnut colours are more of a blackish brown, and the white is clouded with gray; they are altogether less brilliant than the adult birds.

The Ruddy Sheildrake has been shot near Dublin, and added to the collection of Thomas William Warren, Esq., of Blessington-street.

THE COMMON WILD DUCK, OR MALLARD OF BRITISH AUTHORS,

Is abundant, and very commonly distributed over all our islands; but the draining and reclamation of land, has very considerably diminished their numbers, and the produce of the decoys, in the fens, which formerly furnished a handsome income to the followers of the occupation, is now getting reduced. They are the origin of our domestic duck, and are spread over the northern and temperate portions of Europe, Asia, and America. They are everywhere migratory birds, and although they breed abundantly, in our islands, and the adjacent parts of the Continent, yet their great rendezvous is in the higher latitudes, whence, on the approach of winter, vast flocks wing their way southwards, visiting marshes, lakes, and rivers, and returning northwards early in spring, or separate into pairs, and partially leave their more frequent localities. They now either retire to secluded pools, or to ditches, and soon after to upland pastures, where the nest is generally made, being, almost, never placed immediately in, or near the great or common rendezvous, to which the young are led, soon after hatching. They sometimes vary their place of nesting, being seen on the summit of a precipitous rock; and Mr. Selby mentions having found a wild duck hatching her eggs in a deserted crow's nest, thirty feet from the ground. It is usually constructed of dried grass, or vegetable substances, and warmly lined with the down from the parent bird. I have known a half-domesticated duck to build her nest and hatch out her

young on the top of a very high hay-rick, and bring them down in safety.

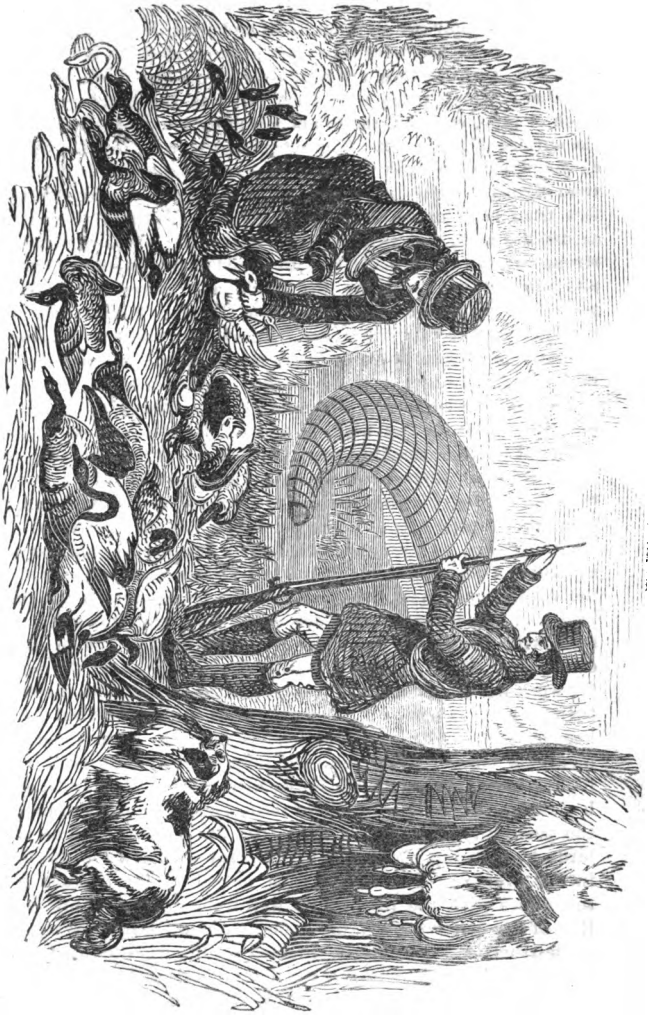
Towards the middle of summer, the plumage of the male undergoes a remarkable change, and approaches in colouring to that of the female. With the autumn moult, the drake regains his beautiful dress. This alteration is not so observable in the tame drake. Upon the sea-coast, there is always a considerable number to be found during winter, and in severe weather. In some parts of America, they are not known; in the Floridas, they are, at times, seen in such multitudes as to darken the air, and the noise they make, in rising, from off a large, submerged savannah, is like the rumbling of thunder. A great, distinguishing mark of the species, is the curled feathers of the tail.

"Oft as the sun's last lingering ray,
Gleams faintly o'er the fading scene,
By some still lake I bend my way,
Where, decked in plumage brown and gray,
The mallard oft is seen;
With glossy neck of emerald hue,
And wings barr'd with the deepest blue,
That sapphire gives; and ruddy breast,
By the clear, dimpling waters prest;
To sedgy covert, swimming near,
Where, on her nest, of rushes made,
His mate, in humbler garb arrayed,
Broods o'er her eggs, with anxious care."

The female is not so large, and of a rusty brown, spotted with dusky black; the speculum on the wing is like the male, but none of the tail feathers are curved. The legs of both sexes are orange.

THE DECOY,

For catching wild ducks, affords considerable excitement, to the fowler. It is usually made where there is a large sheet of water, surrounded by wood, and planted with willows, or other underwood, and behind it a marshy and uncultivated country, where the wild-fowl may securely sleep, during the day-time. It generally occcupies one or two acres. In the most sequestered part of this lake, frequented by the birds, a ditch is cut, which is about twenty yards long, and four yards across, at the entrance, and decreases gradually in width, from the entrance to the farther end, which is not more than two feet wide. The ditch is of a circular form, but does not bend much for the first ten yards. The banks of the lake on each side of this ditch (or "pipe," as it is



THE DECOY

called), are kept clear from reeds, coarse herbage, &c., in order that the fowl may get on them, to sit and dress themselves. Along the ditch, poles are driven into the ground, close to its edge, on each side, and the tops are bent over across the ditch, and tied together. These poles, thus bent, form at the entrance of the ditch or pipe, an arch, the top of which is ten feet distant from the surface of the water. This arch is made to decrease in height, as the pipe decreases in width, so that the remote end is not more than eighteen inches in height. The poles are placed about six feet from each other, and connected by poles laid lengthwise across the arch, and tied together. Over the whole is thrown a strong net, which is made fast to a reed fence, at the entrance, and nine or ten yards up the ditch, and afterwards strongly pegged to the ground. At the end of the pipe, farthest from the entrance, is fixed a "tunnel-net," about four yards in length, of a round form, and kept open by hoops, about eighteen inches in diameter, placed at a small distance from each other, to keep it distended. Between each pipe, and the whole length of it, a shade of reeds, about six feet high, is erected, for the purpose of concealment to the attending man, with a few small loop-holes to peep through. Round the whole a high bank is raised, and as reeds and grass, with bushes, are allowed to grow in wild luxuriance, the interior of the pond is entirely hidden from view. In length of time, by continued cultivation, the appearance becomes similar to a plantation, for game, in an extensive, marshy waste; indeed, in most places, it is much used by hares, and occasionally by foxes. The decoy ducks are either half domesticated, tame-bred wild ducks, or the small domestic ducks, known as the call-ducks. They make excursions from the lake, at the season for working the decoy, and return, accompanied with flocks of their new acquaintance. Their return is closely watched by the keeper, both night and day, who is ready to greet them with plenty of corn. This keeps all quiet till daylight (if a night flight), but is seldom successful without a brisk wind. All along both sides, the screens formed of reeds are set up, so as to prevent the possibility of the birds seeing the decoy-man; and as these birds feed during the night, all is ready prepared for the sport in the evening. The fowler, then placed on the leeward side, sometimes with the help of his well-trained dog, but always by that of his better-trained, tame, decoy ducks, begins the business of destruction. The latter, directed by his well-known whistle, or excited forward by it, and the floating oats or hempseed which he strews occasionally upon the water, entice all the wild ducks

after them, under the netting, and as soon as this is observed, the man or his dog is, from the rear, exposed to the view of the birds, by which they are so alarmed, that they dare not offer to return, and are prevented, by the nets, from escaping upwards; they, therefore, press forward in the utmost confusion, scrambling and squalling to the end of the pipe, into the purse-nets, prepared to receive them, while their treacherous guides remain behind, in conscious security. When they are all in, the man gives the net a twist, so as to prevent them from getting back; he then takes the net off from the end of the pipe, and taking them out, one by one, he dislocates their necks, when hundreds are sometimes thrown into a pit-hole, purposely prepared. The net is afterwards hung on again, for the repetition of the process.

It is not only necessary for a decoy-man to have a good helper, but a well-trained dog, which is a very principal in the performance. The ducks always prefer facing the wind, so that if many pipes are constructed on the same lake, they are arranged to answer different winds, so as to be able to work the one, best suited to the inclination of the birds. The season allowed, by Act of Parliament, for catching these birds, in this way, continues only from the latter end of October till February.

To be successful, you must have cold weather, without frost; then you must have the wind down the pipe, and with a breeze; and with all this you may be disappointed, or you may have an overflow of success. In 1795, the Tillingham decoy, in Essex, netted, after every expense, upwards of eight hundred pounds; and, in 1799, ten thousand head of widgeon, teal, and wild-duck, were caught, in a decoy of the Rev. Bate Dudley, in the same county. Thirty thousand francs have been paid for the produce of Lake St. Lambert, near Paris, for one season.

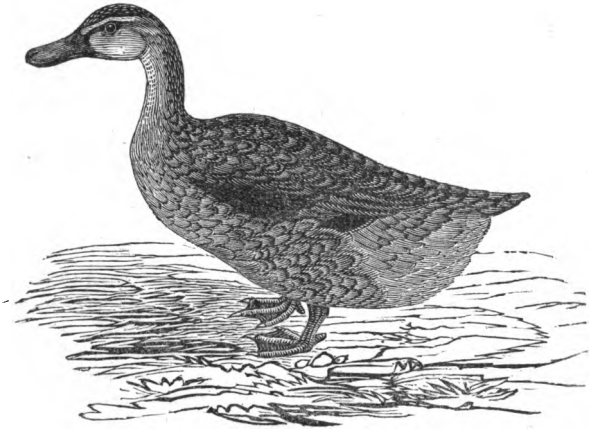
THE CALL-DUCK

Is a small variety of the domestic duck, much addicted to calling; on seeing any bird on flight, they instantly call out, so as to induce its return. They are of the colour of the wild duck; they take their place amongst them, and are trained to lead them into the nets, and, when there, to desert them. They are sometimes white, or spotted with white, which the fowler's prefer, as being the better able to distinguish them from their wild companions—a circumstance of much consequence, as well-trained call-ducks are most valuable to the decoy-man. They are frequently kept by those who have collections of water-fowl, to prevent their birds from straying, and, if astray, to call them back. We have

several decoys at work in Ireland, particularly in the north, which are sources of great emolument.

THE DOMESTIC DUCK

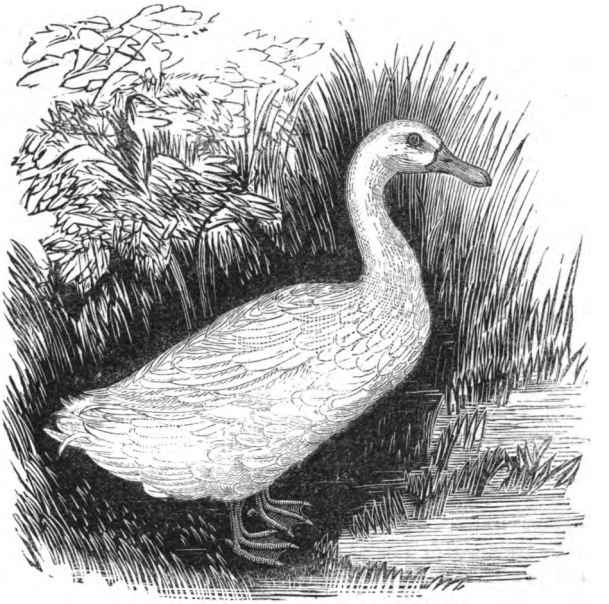
Can be easily traced to the wild original, all the domestic varieties having the curl in the tail, a marking peculiar to the mallard, amongst the wild varieties. Indeed, there is no difficulty in getting the common wild duck to breed in any situation; I have had them to increase, abundantly, amidst the bustle of a small garden, with various water-fowl, in the same enclosure—and, perhaps, would prove better mothers than the entirely domesticated bird. I have found they would be easily reduced to domestication, and an occasional cross would improve the flavour of the tame bird. Montague, in describing the large domestic duck, which he calls the Rouen duck, says—"These are only half-domesticated ducks, which are obliged to leave the canals, or pieces of water, belonging to private persons, when they become frozen." I have had a domestic drake to pair with, and show the greatest possible attachment to a pintail duck; but I was not fortunate in breeding them.



THE ROUEN DUCK

Is a large variety, originally from France, of darker flesh and higher flavour than our native ducks, and, by some, much

preferred to our usual varieties. They are very prolific; a duck has been known to lay, in autumn, during forty-six nights, successively, after which she continued to lay every other night. They are usually of a dark colour.



THE AYLESBURY DUCK

Is a large and beautiful variety of white duck, both useful from size, and ornamental from appearance, and no duck easier to propagate. They are not only productive of white, downy feathers, but white skin and delicate and savoury flesh; and, wherever offered for market, fetch a good price, from their great size and superiority.

THE DUTCH HOOK-BILLED DUCK

Is sometimes coloured, and frequently white, and occasionally found of either, or both colours, with top-knot. They are said to

be more prolific than the ordinary kinds. In a collection of water-fowl, they are kept more for the purpose of variety than utility, as they are smaller than our improved breeds. The beak has a considerable curve downwards.

THE PENGUIN DUCK

Has been imported from Bombay, and is the domestic duck of that country. They are more curious than ornamental; they are of a dirty dun colour, with their legs farther behind than our ordinary duck, which obliges them to stand nearly erect, when making an effort at quick motion, when on land.

THE BLACK DUCK,

Imported by the London Zoological Society, from Buenos Ayres, is a very beautiful domestic duck. They are perfectly black, presenting a splendid green and purple metallic appearance. It is a singular fact that these birds occasionally throw out a number of white feathers, and it frequently happens that they moult entirely white. Another singularity is, that, at the beginning of the season they lay black eggs, the colouring matter of which is easily removed; on continuing to lay, the colour gradually reduces to that of our ordinary duck-eggs.

THE TOP-KNOT DUCKS

Are sometimes very handsome, but the top-knot does not seem to be confined to any particular variety; I have had the white Aylesbury, and Dutch hook-billed, both white and coloured, with top-knots; and cannot account for it, but can only state the fact, that I have kept top-knot ducks and drakes together, which produced perfectly plain-headed birds.

THE MUSK DUCK, *corrupt* MUSCOVY,

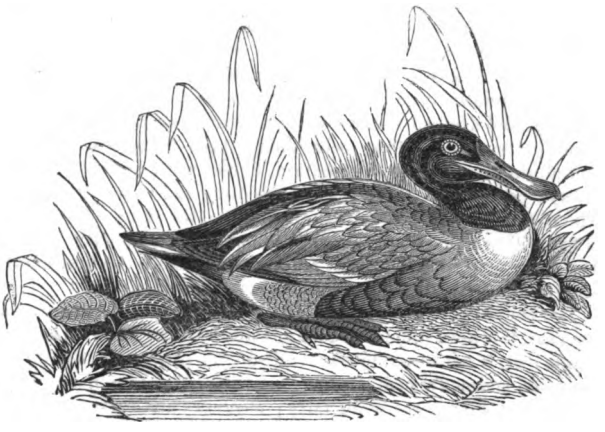
Is a native of South America, where it is found in both a wild and tame state; it is an entirely distinct species from our common duck, and the drake much larger. It has a red, carunculated membrane covering the cheeks, and extending behind the eyes, and is crested; it has a musky odour, from which it is named; the female is much less than the male. In a wild state it is of a dark, brownish black, but found of all colours in a domestic state.

The male bird readily crosses on our common duck, and produces a hybrid variety. It is said the female will again breed with the common duck—a circumstance I am not cognizant of, although I have kept many of them. The musk drake is an unpleasant fowl, in a poultry-yard, as they frequently injure both ducks and poultry, and are bad water-fowl, preferring small puddles to pure ponds or streams. They occasionally take flight, like pigeons, and alight on any exalted situation, house, wall, or tree; and are always perchers at roost. They are dirty and voracious feeders. The eggs are much like our common sort; the time of incubation is five weeks; the young are slow in coming to maturity, and are said to be delicious, if dressed for the table before the first moult, after which they are tough, high-flavoured, and coarse.

The Domestic Duck will find its own food for the greater part of the year, if it have sufficient scope of water to furnish it with aquatic plants; or, if permitted to ramble through a plantation, the beech-mast and acorns furnish it with abundance of nutrition—so much so, as to be always ready for table; meadows and pasture grounds afford it insectiverous matter, and if an occasional feed of boiled potatoes, with a little grain, be given, it is sure to flourish. One drake is sufficient for five or six ducks. They begin to lay in February, when they require additional food. They usually lay either at night, or early in the morning—a circumstance that should be attended to, as, if permitted to ramble away, when about to lay, they frequently drop their eggs in the water; but, if confined a few times, they evince an inclination to lay in the same place. The time of incubation is thirty days; after which the young follow the parent, and should be kept from the water for a couple of days. Soft food agrees best with them; barley-meal and water, mixed thin, or chopped egg and oatmeal, is a favourite food. It is necessary to preserve the young from the rapacity of the raven, hooded-crow, and magpie, which are always on the watch for them. The flesh of the tame duck is more easily digested than that of the goose, and the flesh of the wild duck still more so than that of the tame.

THE SHOVELLER,

Is a very beautiful species of duck, and the flesh of exquisite flavour. It is smaller than the Mallard, and not very abundant in Britain; but frequently shot or taken in the decoys, in both England, Ireland, and Scotland, where it occasionally breeds, but is much more a winter visitor. It is very abundant in Hol-



THE SHOVELLER.

land. Wilson describes it as common in America; its range likewise extends to Africa. It has a singular preparation of fine, long, comb-like teeth, through which it strains its food, which chiefly consists of insects, worms, and larvæ, and will not succeed well in an enclosure, where it cannot procure such food. The bill of this beautiful species is black, spreading near the end to a great breadth; the head and neck, in some lights, appear brown, in others, rich green; but anterior to the eyes, and on the crown and throat, there is the least reflection of the bright colour; lower parts of the neck, breast, scapulars, and sides of the rump, pure white; back, blackish brown, gradually shading to greenish on the rump and upper tail covers; whole of the wing, anterior to the great coverts, with the outer webs of the large scapulars, grayish blue. The latter have a remarkable form, the inner white web being produced in a narrow point, beyond the outer. The lower scapulars are blackish green; the tips along the shafts, for a narrow space, white; lesser coverts clove-brown, with white tips, secondaries bright green; belly, vent, and flanks chesnut brown; under tail coverts, glossy blackish green; tail, clove-brown, with pale edges; legs, orange-red. It, as well as other ducks, has its periodical changes—the male bird, at some periods, assuming the colour of the female, which much resembles the

common wild duck in colour, is livid brown above, with pale, yellowish brown on the under parts, the speculum less vivid than in the male. Weight, about twenty-two ounces.

THE HARLEQUIN DUCK,

Is another of our very beautiful water-fowl: it is a scarce visitor in Britain, but in America it was known to Wilson, Audubon, and Buonaparte. It has been found to breed in the Bay of Fundy, under the bushes, a few yards from the water; but in Newfoundland and Labrador, they frequent, for the same purpose, the inland lakes, incubating near the edges. It is beautifully contrasted with black and white stripes, harmonized by a mixture of chesnut red and gray. The secondaries are black, glossed with indigo-blue, forming the speculum; quills, brownish-black. Scotland and the Orkneys, are its favourite resort. Mr. Yarrell mentions having purchased two in the London market. It has been shot in Cheshire.

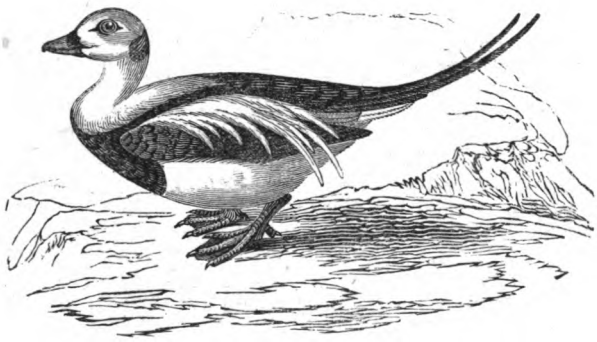
THE GADWALL,

Though abundant in Holland, from whence I have had living specimens, is rather scarce in Britain; it is a winter visitor, in Ireland, but scarce; it breeds in the high northern latitudes of Europe, Asia, and America; it is a fresh-water duck, being seldom found on the sea coast. Its food is insects and their larvæ, fresh-water shelled mollusks, small fishes, and aquatic plants, and grain of any sort; its flesh is in high estimation; it is of modest colour, consisting of brown, gray, white, and blackish-brown; speculum white, with a black anterior border; bill brownish-black, legs orange. The female is not so bright in her colouring as the male; it is about the size of a widgeon, but longer, and smaller in shape.

THE RED-HEADED POUCHARD, OR DUN-DIVER

Of British authors, is to be found during the winter months in most parts of Great Britain, and is known to breed in both England and Holland. In America it is found in great numbers, in the states of Illinois, Indiana, Ohio, and Kentucky. It is a diver, for its food; will feed on tadpoles, lizards, grass, corn, beech-mast, and acorns. The head and neck are of a rich chesnut-brown, shading into deep brownish-black on the breast; the rump,

tail, and vent black; the rest of the body of a delicate, pale gray, minutely waved over with blackish gray. It is much esteemed for the table.



THE LONG-TAILED DUCK

Is not a very abundant British species, but found, during the winter, in most parts of England and Ireland; in Scotland, towards the north, it is more common. It breeds in Norway, Denmark, Sweden, Iceland, &c. Audubon found it breeding in Labrador, by the fresh-water lakes. It is about the size of the widgeon. The bill is black; down the middle and across the tip orange; irides red; the fore part and sides of the head are reddish gray; on each side of the neck, just below the head, is an oval, black spot; the hind part of the head and throat, and remaining part of the neck and breast white; back and rump black; sides of the upper tail coverts white, the middle black; the lower belly and vent white; the scapulars white, long, and pointed; the wings chiefly black, with a mixture of chesnut; the four middle tail feathers are black, the others white; the two middle ones are narrow, and exceed the others three inches and a half; legs of a dull red; claws black. The down is said to be as valuable as that of the Eider duck.

THE VELVET DUCK, VELVET SCOTER, OR GREAT BLACK DUCK,

Is a sea duck, and winter visitor on our coasts; but more abundant in the north, and common, in winter, in the Orkneys. It

is a migratory bird in America, and breeds under the low boughs of bushes near the sea. The plumage is entirely of a deep velvet black, except a white spot on the lower eyelid, which passes behind the eye; the base and margin of the bill are black, the other parts bright orpiment-orange; inside of the tarsus carmine-red; toes orange-red, the membranes black. The plumage of the female is brownish black. The young resemble the female during the first year.

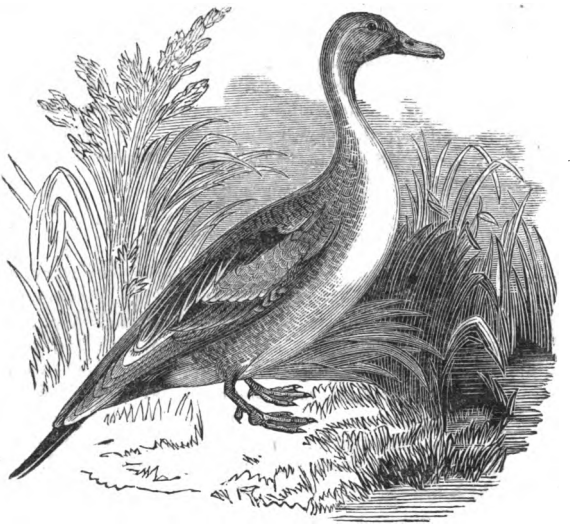
THE COMMON BLACK SCOTER

Is more difficult of approach than the last, being very wary, and escapes by diving; is not abundant here, but is common on the continental shores. It is a smaller species than the velvet duck, the form of which it somewhat resembles, the tail being rather more wedge-shaped and lengthened. There is not a spot of white on the whole bird; the feathers on the head and neck are slightly elongated, and have a rich gloss of indigo-blue; the remaining plumage is a deep, dull black; the first quill has a considerable emargination; the bill black, tarsi and feet blackish red. The female blackish brown, paler beneath.

THE PINTAIL DUCK, OR WATER PHEASANT,

Is a winter visitor of our inland lakes and fens, and associates with the mallard, widgeon, and teal; it is easily reduced to domestication, but I have not had an instance of its breeding, and although I have had both males and females together, on the same water, a female preferred the caresses of a white, hook-billed drake, to her own species, and got so intimate with him, that I found it impossible to separate them, and he was equally bound to her. There are instances of hybrids between this bird and the mallard been shot, and it has likewise been known to breed with the widgeon.

It is noticed by Wilson and Audubon, and considered, in America, as an inland bird. It is very abundant on the waters of the Mississippi, and is found to ramble in the woods, in quest of beech-mast, of which it is particularly fond. In Europe its principal resort is Holland, France, Germany, and the British Islands, the fens of Lincolnshire, Norfolk, &c. It is shy and wary. The pintail duck is a bird of graceful proportions, with a slender neck, and elongated tail, and undergoes the changes of colour, usual in the duck tribe, the male bird assuming the



THE PINTAIL DUCK.

appearance of the female, after the breeding season. The flesh is of the finest flavour; it weighs about two pounds. When in full plumage, the head and throat of the male bird are dark hair brown; the lower part of the neck, and two streaks running up to the hind part of the head, the breast, and under part white; back of the neck deep brown. Flanks and thighs with five transverse black lines; under tail coverts velvet black. Back marked with alternate varying lines of black and grayish white. Scapulars black; tertials long, acuminate, and black, with yellowish white margins; lesser wing coverts deep smoke gray; speculum, blackish green, with a bronzed reflection, bordered below with white; quills brown; two middle tail feathers elongated, acuminate, and black; the rest brown, margined with white; bill black; legs blackish gray.

THE TUFTED DUCK, OR TUFTED POUCHARD,

Is a small, round, plump-bodied duck, weighing about twenty-five ounces. In winter it is equally spread over the British Islands,

but not abundantly; it is very shy and wary, and, from being an expert diver, usually escapes from our decoys; it is said to breed in confinement. The head is adorned with a long and graceful crest of a rich, blackish green, with a strong, purple gloss; the neck, upper back, and breast, are deep black, the centre of the latter having the feathers tipped with gray; the back, scapulars, and tertials, are also black, very minutely spotted with yellowish white, giving a subdued tint to those parts; the rump, tail, under tail coverts, and thighs, are black; quills of same colour, grayish in the centre of the feather; the greater coverts pure white, with a broad, black tip; belly and vent flanks white; bill bluish gray; tip black.

THE GOLDEN EYE

Is a handsome species of duck; it is not uncommon in Great Britain, and an early winter visitor. It is difficult to be kept in confinement, the food not appearing to agree with it: I could not get it to live for a long period. It is an incessant diver, and rapid flier. They retire to the north in spring, and breed in Scandanavia, Norway, Sweden, and Lapland, in hollow trees. It is well known to American ornithologists. A mature male weighs near two pounds; length between eighteen and nineteen inches; bill black; irides fine bright yellow; head and upper part of the neck black, glossed with green and violet, changeable as viewed in different lights; at the corner of the mouth is a large white spot; the lower part of the neck, the breast, and all beneath, are white; the back, rump, and upper tail coverts, black; scapulars, black and white; the coverts of the wings are black, with a white patch on the lesser, and another on the larger coverts; quill feathers black, except some of the secondaries, which are mostly white; tail black; legs orange. They associate in small flocks, and frequent rivers convenient to the sea.

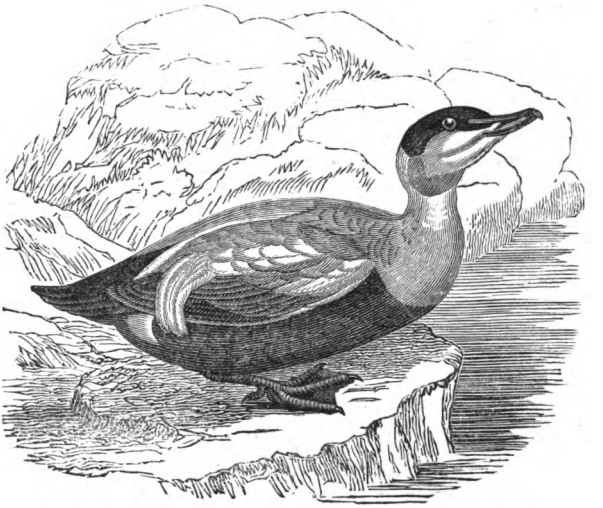
THE WHISTLING DUCK,

Although it cannot properly be classed with the British ducks, still it has been so frequently imported from South America, and the Islands, and being found in almost all the large collections in England and Ireland, a description may not be unacceptable. Its length, from the tip of the bill to the middle of the tail, is about twenty inches. It makes a noise like the whistling of a pipe, from whence it has its name; and, as well as other ducks of that

quarter, is a percher on trees; it is very common in Jamaica: I have had them from Demerara. The bill is like that of the common duck, pectinated on the edges, hooked at the point, and of a dusky colour. The sides of the head are brown, and the top black, where the feathers are long, and point backwards in the form of a crest; the hinder part of the neck is dusky, but the under sides of the head, neck, and throat are white. The neck is speckled with small black spots, and the back, and upper sides of the wings are brown; the greater quills are dark brown, and the covert feathers of the wings have black spots in their middles. The tail is black, as well as the rump, and the feathers that cover the tail above, which is a little pointed in the middle; the breast is of a bright reddish brown, spotted with black, and mixed with a little white on the lower part; the belly is white, with a mixture of black on the sides, and a very little down the middle; the legs are longer than what is common in ducks, and are bare of feathers a little above the knees; the three forward toes are webbed, and there is likewise a lateral web on the side of the inner toe; the legs and feet are lead coloured; and the back toe is placed so high as hardly to touch the ground. These ducks very much resemble the Egyptian geese in colour and appearance, allowing for their much smaller size.

THE EIDER DUCK

Is nearly double the size of the common wild duck; length twenty-two inches. The bill and top of the head are black, taking in the eyes, and continuing in a line on each side, where the feathers project on the bill, almost as far as the nostrils; below the nape of the neck, on each side, the feathers are of a pale green; the rest of the head, neck, breast, back, scapulars, and wing coverts, are white; some of the coverts are long, and somewhat curved at the ends, falling over the quills, which are black; the upper parts of the breast are black; tail black; legs dull green. In some, the base of the wings and middle of the back are black. The female weighs about three pounds and a half; the general colour of the plumage reddish brown, barred with black; the hind part of the neck marked with dusky streaks; on the wings are two bars of white; belly deep brown, indistinctly marked with black; tail dusky; legs dark. They breed in the north of Scotland, particularly on the western isles, on the Farn Islands, and on the coast of Northumberland, in June and July. The duck lays five or six eggs, of a pale, greenish olive colour.



THE EIDER DUCK.

The nest, placed on the ground, is composed of marine plants, and lined with down of exquisite fineness, which the female plucks from her body, three quarters of an ounce of which is sufficient to fill the crown of a hat; it is of admirable lightness and elasticity; it is an article of extensive commerce in Iceland. Both male and female work in concert, in building their nest, and the female carefully covers the eggs, with her down, when she retires for food. Two females frequently associate together in one nest, and incubate in perfect harmony. The down found in a nest is said to be about half a pound. It is a remarkable fact that the down taken from dead birds does not possess the elasticity of that found in the nest: on that account the Norwegians are prohibited, by law, from killing the Eider, for their down. Greenland and Iceland abound with them, and they are numerous on the coast of Labrador. Their flesh is much esteemed, but rather fishy. Sir George Mackenzie, during his travels in Iceland, had an opportunity of observing the Eider ducks, assembled, for the great work of incubation. The boat, in its approach to

the shore, found multitudes of these birds, which hardly moved out of the way, and between the landing-place and the governor's house it required some caution to avoid treading on the nests, while the drakes were walking about, even more familiar than the common ducks, and uttering a sound which was like the cooing of doves. The ducks were sitting on their nests all round the house, on the garden-wall, on the roofs—nay, even in the inside of the houses, and in the chapel. Those which had not been long on the nest generally left it when they were approached; but those that had more than one or two eggs sat perfectly quiet, and suffered the party to touch them. The food of the Eider duck consists of small crustacea, muscles, shell-fish, and other marine animals, in quest of which they dive.

THE WIDGEON

Is an autumnal visitor of our lakes and ponds. It has been known to partially breed with us; but the greater number are migratory, appearing in autumn, and returning in the spring, to their breeding quarters, which are said to be principally Norway, Sweden, and Lapland. The nest is constructed in the same way as of the teal and wild duck, formed chiefly of the down from the breast of the parent bird. They thrive well in confinement, and are very ornamental—the male showing the change of plumage so frequently found in the ducks, after the breeding season, and assuming the brightness of colour as the pairing season approaches. They are constant associates of the mallard and teal. On the male, in adult plumage, the bill is bluish-gray, black towards the tip, and having the nail of that colour. The forehead and crown are pale, buff-orange; chin and throat, black; while the rest of the head and neck are rich orange brown; breast, purplish-red, tinged with gray; belly and vent, pure white; the back, scapular, sides, and flanks are finely waived with irregular bars of black and white; smaller wing coverts, next the shoulders, gray; the others, pure white, the greater coverts with black tips; the secondaries, in the centre, forming the speculum, glossy green; the base and tips of the feathers, black; quills, hair-brown; the tertials, which are always conspicuous in this family, have their inner webs gray, the outer ones velvet-black, margined with pure white; tail, brown, and rather lengthened in form. In the female, the head and neck are yellowish brown, thickly covered with blackish brown spots; upper parts, grayish brown; the feathers with paler margins; breast, belly, and vent,

white; sides and flanks, yellowish brown, which is often, more or less, spread over the other parts.

THE GARGANY, OR SUMMER TEAL,

Is a very beautiful species, something smaller than the widgeon, but not so small as the common teal; it is migratory, is usually taken in the decoys in Somersetshire, in April; it is found in winter through all England and Ireland, but more abundantly in the Orkneys. It is also found in Sweden, Russia, and Siberia, and has been known to breed in Norfolk. The bill of this beautiful species is dark lead colour; irides light hazel; the upper part of the head dusky brown, streaked with dusky; over the eye is a broad white line, passing down the side of the neck; the cheeks and upper part of the neck purplish, marked with minute lines of white, pointing downwards; the breast marked with semicircular lines of brown and black; chin black; belly dirty white, streaked with dusky towards the vent; the sides crossed with numerous small, black, undulated lines; coverts of the wings cinerous gray; the larger ones tipped with white; scapulars long and narrow, the upper ones striped with black, white, and ash-colour, the rest cinerous gray; the speculum on the secondary quill feathers is green, tipped with white; the tail is dusky; legs lead colour; tail possesses fourteen feathers. The female is brown above, streaked with dusky; the white streak behind the eye is very faint, and the green on the wing wanted. It much resembles the female of the common teal; a practised eye will easily distinguish it.

THE COMMON TEAL

Is the smallest of our ducks; weight about twelve ounces; length fourteen inches and a half. The bill is black; irides light hazel; head and neck bay; on the side of the head a green patch, passing backwards, bordered beneath with a whitish line; the lower part of the hind neck, upper part of the back, and part of the scapulars, as well as the sides of the body, a mixture of black and white, in fine, undulated lines; lower part of the neck (before), and breast whitish, marked with roundish spots of black; belly of the same colour, without spots; vent black, bounded with buff-colour; wing coverts brown; quills dusky; some of the secondaries wholly black, and others glossy green, on their outer webs, forming a speculum on the wing; the covers immediately

over these are tipped with white; the tail is cuneiform, consisting of sixteen brown feathers, edged with whitish; legs dusky brown. The female has the head, neck, back, and sides of the body brown, the feathers, more or less, edged with whitish; belly and vent whitish; speculum in the wing like the male. It becomes very familiar in a domestic state, and breeds in confinement. It is a very beautiful addition to a collection of water-fowl, and thrives well with any ordinary care.

THE SUMMER DUCK, WOOD DUCK, OR CAROLINA DUCK,

Has been so abundantly imported, and so frequently bred in both England and Ireland, and even shot here, whether as a visitor or escaped bird, is not well ascertained; they have been shot in the north of Ireland, but have escaped from the enclosure of Arbuthnot Emerson, Esq.; they have likewise been shot in the neighbourhood of Dublin, but have escaped from my enclosure. They are becoming so abundant that the following description, taken from Wilson, may be read with interest:—

"This most beautiful of all our ducks, has probably no superior among its whole tribe, for richness and variety of colours. It is

called the wood duck, from the circumstance of its breeding in hollow trees; and the summer duck, from remaining with us chiefly during the summer. It is familiarly known in every quarter of the United States, from Florida to Lake Ontario, in the neighbourhood of which latter place I have myself met with it in October. It rarely visits the sea shore, or salt marches, its favourite haunts being the solitary, deep, and muddy creeks, ponds, and mill-dams of the interior, making its nest frequently in old, hollow trees that overhang the water.

"The summer duck seldom flies in flocks of more than three or four individuals together, and most commonly in pairs, or singly. The common note of the drake is *peet, peet;* but when, standing sentinal, he sees danger, he makes a noise not unlike the crowing of a young cock, *oe eek! oe eek!* Their food consists principally of acorns, seeds of the wild oats, and insects. Their flesh is inferior to that of the blue-winged teal. They are frequent in the markets of Philadelphia.

"Among other gaudy feathers with which the Indians ornament the calumet or pipe of peace, the skin of the head and neck of the summer duck is frequently seen covering the stem.

"This beautiful bird has often been tamed, and soon becomes so familiar as to permit one to stroke its back with the hand. I have seen individuals so tamed in various parts of the Union. Captain Boyer, collector of the port of Havré de Grace, informs me, that about forty years ago, a Mr. Nathan Nicols, who lived on the west side of Gunpowder Creek, had a whole yard swarming with summer ducks, which he had tamed and completely domesticated, so that they bred and were as familiar as any other tame fowls; that he (Captain Boyer) himself saw them in that state, but does not know what became of them. Latham says that they are often kept in European menageries, and will breed there.

"The wood duck is nineteen inches in length, and two feet four inches in extent; bill, red, margined with black; a spot of black lies between the nostrils, reaching nearly to the tip, which is also of the same colour, and furnished with a large, hooked nail; irides, orange red; front, crown, and pendant crest, rich glossy bronze green, ending in violet, elegantly marked with a line of pure white running from the upper mandible over the eye, and with another band of white proceeding from behind the eye, both mingling their long, pendent plumes with the green and violet ones, producing a rich effect; cheeks and sides of the upper neck, violet; chin, throat, and collar round the neck, pure

white, curving up in the form of a crescent nearly to the posterior part of the eye; the white collar is bounded below with black; breast, dark violet brown, marked on the fore part with minute triangular spots of white, increasing in size until they spread into the white of the belly; each side of the breast is bounded by a large crescent of white, and that again by a broader one of deep black; sides under the wings thickly and beautifully marked with fine, undulating, parallel lines of black, on a ground of yellowish drab; the flanks are ornamented with broad, alternate, semicircular bands of black and white; sides of the vent, rich light violet; tail coverts long, of a hair-like texture at the sides, over which they descend, and of a deep black, glossed with green; back, dusky bronze, reflecting green; scapulars, black; tail, tapering, dark glossy green above, below dusky; primaries, dusky, silvery hoary without, tipt with violet blue; secondaries, greenish blue, tipt with white; wing coverts, violet blue, tipt with black; vent, dusky; legs and feet yellowish red; claws, strong and hooked.

"The above is as accurate a description as I can give of a very perfect specimen now before me.

"The female has the head slightly crested; crown, dark purple; behind the eye, a bar of white; chin and throat, for two inches, also white; head and neck, dark drab; breast, dusky brown, marked with large triangular spots of white; back, dark, glossy, bronze brown, with some gold and greenish reflections. Speculum of the wings nearly the same as in the male, but the fine pencilling of the sides, and the long hair-like tail coverts, are wanting; the tail is also shorter."

THE CANVAS-BACK DUCK,

Being so frequently spoken of in Europe, as superior in flavour to the whole tribe of ducks, will, I hope, plead a sufficient apology for introducing a bird which I cannot find any record of being shot in Great Britain. Wilson so highly lauds it, I extract its description from his able "American Ornithology":—

"This celebrated American species, as far as can be judged from the best figures and descriptions of foreign birds, is altogether unknown in Europe. It approaches nearest to the pochard of England *(Anas ferina)*, but differs from that bird in being superior in size and weight, in the greater magnitude of its bill, and the general whiteness of its plumage. A short comparison of the two will elucidate this point:—The canvas-back measures

two feet in length, by three feet in extent, and when in the best order, weighs three pounds and upwards. The pochard, according to Latham and Bewick, measures nineteen inches in length, and thirty in extent, and weighs one pound twelve or thirteen ounces.

"The canvas-back duck arrives in the United States, from the north, about the middle of October, a few descend to the Hudson and Delaware, but the great body of these birds resort to the numerous rivers belonging to and in the neighbourhood of the Chesapeake Bay, particularly the Susquehannah, the Patapsco, Powtomac, and James's Rivers, which appear to be their general winter rendezvous. Beyond this, to the south, I can find no certain accounts of them. At the Susquehannah, they are called canvas-backs; on the Potowmac, white-backs; and on James's River, sheldrakes. They are seldom found at a great distance up any of these rivers, or even in the salt-water bay; but in that particular part of tide water where a certain grass-like plant grows, on the roots of which they feed. This plant, which is said to be a species of *valisineria*, grows on fresh-water shoals of from seven to nine feet (but never where these are occasionally dry), in long, narrow, grass-like blades of four or five feet in length; the root is white, and has some resemblance to small celery. This grass is in many places so thick, that a boat can with difficulty be rowed through it, it so impedes the oars. The shores are lined with large quantities of it, torn up by the ducks, and drifted up by the winds, lying like hay in wind-rows. Wherever this plant grows in abundance, the canvas-backs may be expected, either to pay occasional visits, or to make it their regular residence during the winter. It occurs in some parts of the Hudson; in the Delaware, near Gloucester, a few miles below Philadelphia; and in most of the rivers that fall into the Chesapeake, to each of which particular places these ducks resort; while in waters unprovided with this nutritive plant they are altogether unknown.

"On the first arrival of these birds in the Susquehannah, near Havre de Grace, they are generally lean; but such is the abundance of their favourite food, that, towards the beginning of November, they are in pretty good order. They are excellent divers, and swim with great speed and agility. They sometimes assemble in such multitudes as to cover several acres of the river, and, when they rise suddenly, produce a noise resembling thunder. They float about these shoals, diving and tearing up the grass by the roots, which is the only part they eat. They are extremely shy, and can rarely be approached, except by stra-

tagem. When wounded in the wing, they dive to such prodigious distances, and with such rapidity, continuing it so perseveringly, and with such cunning and active vigour, as almost always to render pursuit hopeless. From the great demand for these ducks, and the high price they uniformly bring in market, various modes are practised to get within gunshot of them. The most successful way is said to be, decoying them to the shore by means of a dog, while the gunner lies closely concealed in a proper situation. The dog, if properly trained, plays backwards and forwards, along the margin of the water, and the ducks, observing his manœuvres, enticed, perhaps, by curiosity, gradually approach the shore, until they are sometimes within twenty or thirty yards of the spot where the gunner lies concealed, and from which he rakes them, first on the water, and then as they rise. This method is called *tolling them in.* If the ducks seem difficult to decoy, any glaring object, such as a red handkerchief, is fixed round the dog's middle, or to his tail, and this rarely fails to attract them. Sometimes, by moonlight, the sportsman directs his skiff towards a flock, whose position he had previously ascertained, keeping within the projecting shadow of some wood, bank, or headland, and paddles along so silently and imperceptibly, as often to approach within fifteen or twenty yards of a flock of many thousands, among whom he generally makes great slaughter.

"The canvas-back, in the rich, juicy tenderness of its flesh, and its delicacy of flavour, stands unrivalled by the whole of its tribe in this, or perhaps any other quarter of the world. Those killed in the waters of the Chesapeake are generally esteemed superior to all others, doubtless from the great abundance of their favourite food which these rivers produce. At our public dinners, hotels, and particular entertainments, the canvas-backs are universal favourites. They not only grace, but dignify the table, and their very name conveys to the imagination of the eagar epicure, the most comfortable and exhilarating ideas. Hence, on such occasions, it has not been uncommon to pay from one to three dollars a pair for these ducks; and, indeed, at such times, if they can they must be had, whatever may be the price.

"The canvas-back will feed readily on grain, especially wheat, and may be decoyed to particular places by baiting them with that grain, for several successive days. Some few years since a vessel loaded with wheat was wrecked near the entrance of Great Egg Harbour, in the autumn, and went to pieces. The wheat floated out in vast quantities, and the whole surface of the bay

was in a few days covered with ducks of a kind altogether unknown to the people of that quarter. The gunners of the neighbourhood collected in boats, in every direction, shooting them; and so successful were they, that, as Mr. Beasley informs me, two hundred and forty were killed in one day, and sold among the neighbours, at twelve and a half cents a piece, without the feathers.

"The canvas-back is two feet long, and three feet in extent, and, when in good order, weighs four pounds; the bill is large, rising high in the head, three inches in length, and one inch and three-eighths thick at the base, of a glossy black; eye, very small; irides, dark red; cheeks and fore part of the head, blackish brown; rest of the head and greater part of the neck, bright glossy reddish chesnut, ending in a broad space of black that covers the upper part of the breast, and spreads round to the back; back, scapulars, and tertials, white, faintly marked with an infinite number of transverse waving lines or points, as if done with a pencil; whole lower parts of the breast, also the belly, white, slightly pencilled in the same manner, scarcely perceptible on the breast, pretty thick towards the vent; wing coverts, gray, with numerous specks of blackish; primaries and secondaries, pale, slate, two or three of the latter of which nearest the body are finely edged with deep velvety black, the former dusky at the tips; tail, very short, pointed, consisting of fourteen feathers of a hoary brown; vent, and tail-coverts, black; lining of the wing, white; legs and feet, very pale ash, the latter three inches in width, a circumstance which partly accounts for its great powers of swimming.

"The female is somewhat less than the male, and weighs three pounds and three quarters; the crown is blackish brown; cheeks and throat of a pale drab; neck, dull brown; breast, as far as the black extends on the male, dull brown, skirted in places with pale drab; back, dusky white, crossed with fine waving lines; belly, of the same dull white, pencilled like the back; wings, feet, and bill, as in the male; tail-coverts, dusky; vent, white; waved with brown."

Having concluded the description of waterfowl, I would call the particular attention of the keepers of them to an operation, which, if not performed, will subject the owners to considerable loss. I mean the

PINIONING

Of all the wild varieties. A simple and easy mode of pinioning is performed by getting the bird held on its back; and, when in that position, finding the bastard wing, consisting of three or five large flight-feathers, and with a well-sharpened knife, nicely dissecting through the joint; or, if you have not sufficient nerve to use the knife, get a broad chisel, well sharpened, and, when you find the joint, introduce the chisel between the bones, and, with a single blow, you can nicely separate them. You will then have to carefully divide the adhering skin.

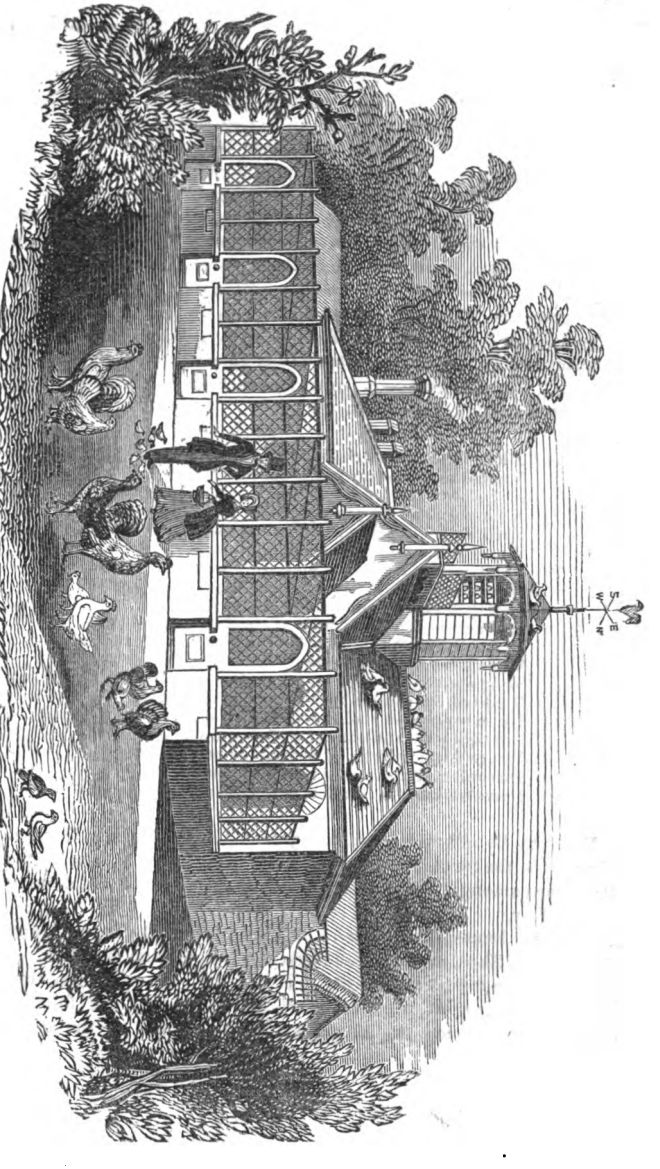
I have frequently practised the above; and while others, by violence, have lost their fowl, I never lost a bird by the operation, nor never used any ligature or cautery.

I have consulted one of the most eminent surgical practitioners in the kingdom, as to the above operation. He entirely coincides with me.

CHAPTER IX.

POULTRY-HOUSES.

In a secluded nook, on the boundaries of the Home Park, sheltered from the prevailing winds, by stately clumps of elm trees, stands the HOME FARM—or the farm attached to Windsor Castle; the private farm of her Majesty. In this establishment, which was founded by George III., is situated the royal fowl-house and poultry-yards, as figured in the annexed page, but of which, notwithstanding their great interest, the public know nothing, save the mere fact of their existence. Here her Majesty, retiring from the fatigues of state, finds a grateful relief in the simple pursuits of a country life; and here, too, it may be, like Louis XVI. in the Jardin Anglaise, of the Petite Trianon, she seeks the renovation of those higher powers, which find their best, if not their only home, in nature, or its God. In cultivating the homely recreations of a farm, her Majesty has exhibited great industry and much good taste. The buildings and the farm routine, which sufficed for the clumsy management of 1793



THE QUEEN'S POULTRY AND POULTRY-HOUSE, WINDSOR.

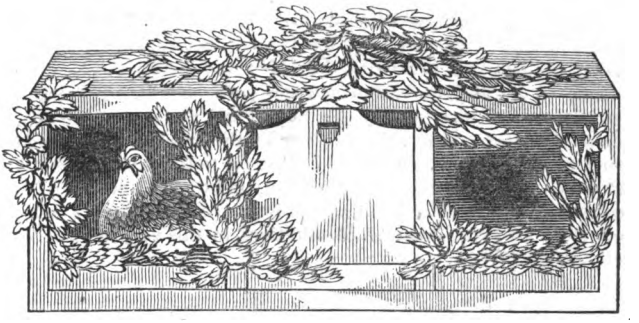
have been discovered, by her Majesty, to be totally unsuited to the more enlightened system of 1849, and hence, under the direction of her Majesty and Prince Albert, assisted by Lieutenant-Colonel Wemyss, Lord Lincoln, and Mr. Engall, her Majesty's intelligent and respected bailiff, an entire reorganization of the establishment has been determined, and is now in progress. In these pursuits, and in her continued prosecution of them, the Queen has, in our opinion, exhibited sound judgment and a healthy taste. There are some, we know, who would have the Queen to be "every inch a Queen"—even to the forsaking of her humanity. But, no! the Queen both thinks and acts after a very different fashion; and it has resulted that in all the royal arrangements of the present reign, there is to be found that love of neighbourhood, and that affectionate interest in the every-day furniture of life, which is so truthfully depicted in the following lines of a Scottish poet; and in which, we may be allowed to say, we most heartly acquiesce:—

"I love the neighbourhood of man and beast:
I would not place my stable out of sight.
No! close behind my dwelling it should form
A fence on one side, to my garden plot.
What beauty equals shelter, in a clime
Where wintry blasts with summer breezes blend,
Chilling the day? How pleasant 'tis to hear
December's winds, amid surrounding trees,
Raging aloud! How grateful 'tis to wake
While raves the midnight storm, and hear the sound
Of busy grinders at the well-filled rack;
Or flapping wing and crow of chantileer,
Long ere the lingering morn; or bouncing flails,
That tell the dawn is near! Pleasant the path
By sunny garden wall, when all the fields
Are chill and comfortless; or barn-yard snug,
Where flocking birds, of various plume, and chirp
Discordant, cluster on the leaning stack,
From whence the thrasher draws the rustling sheaves."

We may be allowed, then, to agree with her Majesty in thinking, that the farm, the dairy, and even the kennel of the Home Park, are amongst the best embellishments of the royal domain of Windsor.

The fowl-house, designed and built by Messrs. Bedborough and Jenner, of Sheet-street, Windsor, is a semigothic building, of simple and appropriate beauty. It consists, as our engraving shows, of a central pavilion, used for inspecting the fowls—crowned, on the top, by an elegant dove-cot, and on the sides,

of wings capable of symmetric extension, in which are placed the model roosting-houses, and laying and breeding nests of the fowls.



HER MAJESTY THE QUEEN'S HATCHING AND LAYING NESTS.

The ground, in front, slopes towards the park, and is enclosed and divided by light, wire fences, into separate wards, for the "run" or daily exercise of the birds. Inside these wards, gravel walks, bordered by grass plots, lead to the entrances of the fowl-house. In the proportions, distribution, and fittings of the apartments of this house, considerable knowledge of the habits, with a corresponding and most commendable regard to the conveniences of their granivorous tenants, has been displayed; the chambers are spacious, airy, and of an equal and rather warm temperature, which accords with their original habits, and their nests are made, as far as possible, to resemble the dark, bramble-covered recesses of their original jungles. In this particular her Majesty has set a good example to the farmers of this country, who too often follow the false routine of their fathers, rather than consult the habits, and obey the natural intincts of the animals about them.

Her Majesty's collection of fowls is very considerable, occupying half a dozen very extensive yards, several small fields, and numerous feeding-houses, laying-sheds, hospitals, winter courts, &c.

It is in the new fowl-house that the more rare and curious birds are kept—consisting of Cochin China, white Java bantams, some splended bantams of Sir John Sebright's breed, a

cock of which, remarkable for his martial bearing, is a great favourite with Prince Albert, with other fine bantams and some curious crosses with grouse, and several frizzled fowl, remarkable for their silky, hair-like feathers.

The laying nests at Windsor are composed of dry twigs of heather—the Erica tetralix of our heaths—and small brambles of hawthorn, covered over with the lichen raugiferinus—the white lichen of our hedges, barn-doors, and park palings. These materials, rubbed together, by the motion and pressure of the hen, emitted a light powder, the produce of the crushed leaves; and this, finding its way, between the feathers, to the skin, was found to have the immediate effect of discharging the bird of every description of parasite. The Commissioners of Woods and Forests are about to make considerable additions to this very interesting establishment.

A work on poultry would not be complete, if a description of the most splendid poultry-house ever erected were omitted. The following is taken, on the spot, from that of

LORD PENRHYN.

The most magnificient poultry-palace, perhaps, that ever has been built, is that of Lord Penrhyn's, at Winnington, in Cheshire. It consists of a handsome, regular front, extending about one hundred and forty feet, at each extremity of which is a neat pavilion, with a large, arched window. These pavilions are united to the centre of the design, by a colonade of cast-iron pillars, painted white, which support a cornice, and a slate roof, covering a paved walk, and a variety of different conveniences for the poultry, for keeping eggs, corn, and the like. The doors into these are all of lattice-work, also painted white, and the framing green. In the middle, of the front, are four handsome stone columns, and four pilasters, supporting, likewise, a cornice, a slate roof, under which, and between the columns is a beautiful mosaic iron gate; on one side of this gate is an elegant little parlour, beautifully papered and furnished; and at the other end of the colonade a very neat kitchen, so excessively clean, and in such high order, that it is delightful to view. The front is the diameter or chord of a large semi-circular court behind, round which there is also a colonade and a great variety of conveniences for poultry. This court is neatly paved, and a circular pond and

pump are in the middle of it. The whole fronts towards a rich little paddock, in which the poultry have the liberty to walk about, between meals. At one o'clock a bell rings, and the beautiful gate in the centre is opened. The poultry being then mostly walking in the paddock, and knowing by the sound of the bell, that their repast is ready for them, they fly and run from all quarters, and rush in at the gate, every one striving which can get the first share in the scrabble. There are about 600 poultry, of different kinds, in the place; and although so large a number, the semicircular court is kept so very neat and clean that not a speck of dung is to be seen. This poultry-palace is built of brick, except the pillars and cornices, the lintels and jambs of the doors and windows; but the bricks are not seen, being all covered with a remarkably fine kind of slate, from his lordship's estate in Wales. These slates are close-jointed, and fastened with screw-nails on small spars fixed in the brick; they are afterwards painted, and fine white sand thrown on, while the paint is wet, which gives the whole an appearance of the most beautiful freestone.

Properly constructed

POULTRY-HOUSES

Are essential arrangements for the preservation of your feathered stock, which should be placed, if possible, as to have an eastern aspect, so as to be open to the morning sun; sheltered by a plantation, or sufficient shrubs, to screen the birds from the summer mid-day sun, or inclement winter winds, both being equally injurious to them. The poultry-house should be constructed to give as much warmth as possible, consistent with sufficient ventilation, the advantage of which is quite evident, from the circumstance of the cottier, who has his poultry roosting over his fire, laying abundantly during the winter months; while the opulent farmer, who houses his poultry, in his spacious poultry-house, is not supplied with eggs. The more compact they are kept during the winter months the better, as each will contribute a share of heat to the other, and add to their comfort, and induce laying; the size to be suited to the number kept, and the more compact they are kept in winter the better. The floor should be elevated so as to be perfectly dry, and of such materials as to allow its being swept or raked out daily. The walls close and substantial, so as not to harbour vermin of any kind, and be frequently whitewashed; with a good, air-tight roof, that will fully resist

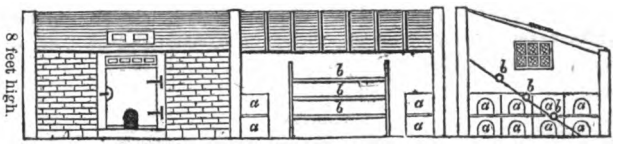
the rain, damp being most destructive to poultry. Windows should be placed in opposite directions, so as to admit of thorough ventilation each day, during the summer months; but one window should be carefully closed at night, even in the summer time, as there is nothing more injurious to poultry, than a thorough draft of air, during their sleeping hours, and both windows should be punctually shut up, every night, during the winter season. In order to admit ventilation and prevent the poultry passing through the windows, a wire lattice should be fitted to each. I would particularly advise the roosting perches to commence low, say about one and a half foot from the ground, and ascend gradually, in the form of a wide ladder; the perches to be placed about twelve inches apart, with an elevation of twelve inches above each other, so as that the droppings of one bird, may not soil the plumage of the other; and to be from one and a half to two inches in diameter, with the sharp angles taken off. The value of low perching cannot but be known to most keepers of fine, large fowl, who are sure to break their breast-bone, when coming down from high perching, and from which they scarcely ever recover. Nests are frequently constructed in the building of poultry-houses, which is, by no means, a bad plan, as they are free from the droppings of the fowl, are rounded in the shape of a nest, at the bottom, and a coat of lime, at any time, renders them perfectly pure. If they are not so constructed you will have to furnish your hens with boxes or baskets, placed steadily, furnished with straw, cut short, so as to prevent accident to the eggs; and should be frequently renewed, and the nests kept perfectly clean. I would prefer boxes to baskets, for hatching, as being less exposed to the action of the air; and, as with the perches, I would recommend their being near the ground, so as to imitate nature, as much as possible, and permit the hens to enter with ease. If there is a difficulty about entry the eggs will be broken; and if the hen fall when about entering a high nest, to lay, if hurt, she will be likely to lay soft or misshapen eggs; I would, therefore, advise them not to be elevated.

Hatching on the ground, as in the case of a hen laying out, has been found most successful, the evaporation from the earth inducing incubation; as a substitute for such evaporation, Cantelo finds it necessary to damp the eggs daily, with a sponge. An aperture should be constructed in the door, to admit the poultry in and out, a little elevated from the ground, so as not to induce vermin to enter; with a perch for the convenience of the birds. They should be supplied with pure, fresh water daily. If a corner

in the house were furnished with fine sand, as a sand-bath, for the poultry, it would conduce to their health and gratification, by ridding them of their accustomed parasites. I do not approve of paved yards for the large fowl, which so frequently brings on them both gout and corns, at a premature age. A shed in the yard, or other shade, is essential to shelter them from rain; and fine sand, in a poultry-yard, is much preferred to any other walk.

As I keep all the fine poultry, pheasants, &c., I am obliged to divide my pheasantry or poultry-house into separate compartments, in order to have them distinct. I have, therefore, erected, to the front and part of the roof, a wire lattice, with lattice doors, which open from the one into the other; so that, by leaving a door open, I can enlarge the compartments, and form two into one when occasion may require it. It is at the extreme end, and fronting a garden, which supplies the birds with an abundance of vegetable matter, with an opportunity of occasionally passing from the rere into a grass plot. It is elevated above the level of the garden, and being in the vicinity of the sea, I have, in it, several inches of sea-sand, which keeps the fowl clean, comfortable, and in good health; and in this sand they delight to roll themselves. Sea-sand has been objected to; but from experience, I would never use any other, when it could be had, and would certainly recommend the nearest approach to it, coarse, gravelly matter being injurious to the feet of poultry.

With some alterations I have adopted Mr. England's poultry-house; but being, from practical observation, decidedly opposed to high roosting perches, or high laying or hatching nests, for the large and fine poultry, I have deviated in these two particulars.



15 feet wide; 10 feet deep; 8 feet high.

a Hatching or laying nests.

b Perches, commencing 1½ foot from the ground, with an elevation of one foot for each perch after the first.

The above is a ground plan and elevation of what I have myself in use; and recommend, in addition, cleanliness, frequent white-

washing with lime, warm situation, good ventilation, and pure water; and that the hens set to hatch be placed in a quiet, rather dark, retired place, in a separate apartment from the laying hens. The cottager is well aware of the advantage of the comfortable keeping of his poultry, near his fire, so as to be in possession of eggs at all seasons. But if he wish to erect a poultry-house outside his cottage, he may take a hint from the annexed, and let it be at the gable end, next his kitchen fire, so as to economize the heat, and dispel the damp.

CHAPTER X.

DISEASES AND CURES.

THE DISEASES OF POULTRY

Are mostly attributable to bad keeping, or improper food, to prevent which, house dry and warm, with good ventilation, and feed with as much variety as possible, and with pure water to drink. If immediately attended to, there is a chance of recovery; but, if neglected for a time, the doubt and difficulty of recovery would not be compensated for by the value of any ordinary fowl, and their recovery, in most instances, is so tedious, that a whole season may pass over without the convalescent hen laying a single egg; under these circumstances, it is a consideration as to whether it may not be a mercy to dispatch the fowl, before it becomes unfit for table use. However, in order to give my favourites a chance, and indulge those who may wish to practise on their poultry, I give the experience of myself and others, as to the best mode of treating them.

VERMIN

Occasionally engender in the feathers of fowl, and collect in quantities in the down of chickens, and become so troublesome, as to prevent them thriving, to dislodge which, sprinkle through the feathers fine, Scotch snuff, or digitalis dried and powdered, or flour of sulphur applied in the same way; and to prevent a recurrence, furnish the fowl with dry, fine sand or ashes, to roll

in, which will keep them perfectly free from all parasites; a very sparing application of white precipitate powder, applied through the feathers, with a camel hair brush, has been found effectual.

MOULTING,

Although it cannot be properly denominated a disease, still some attention is necessary in giving care to your poultry during that period, particularly if it advances into the cold or damp season, so as to have them warmly and drily kept, and well fed with stimulating food—hemp-seed, sun-flower seed, carraway-seed, and a small quantity of black or red pepper; the more warmly or comfortably kept, the quicker the moult. Old fowls moult late, and consequently, do not lay till advanced in the summer; while early pullets will moult early, and lay all the winter, if warmly kept and well fed. Fowls occasionally make the appearance of losing their feathers, before the actual moult, and appear miserably naked. The remedy is, keep them comfortable, and when the moult comes on, their proper clothing will be resumed in their new coat. A want of feathers is sometimes effected by the fowl picking the young or bleeding feathers from their fellows, which they get so much attached to, that they continue to pilfer each succeeding young feather, until they cause such inflammation, as death, in some cases, will ensue. The remedy is, separate such fowl, until the feathers come to maturity, when they will discontinue to pull them out.

ROUP

Is a disease which requires particular attention. It is an inflammation of the head, and one or both eyes, with sometimes a discharge from the beak and nostrils, arising from bad ventilation, confinement, filthy water, bad feeding, or damp dwelling; and if not altered and attended to, at an early period, generally terminates in death; and if recovered, with the loss of at least one eye. At the advanced stage of the disease, the bird becomes foeted; and, if much so, there can be little hopes of its recovery. The treatment is the contrary of what has caused the disease, and warmth, with

2 parts gentian, and
1 part hydriodate of potash.

To be made into pills, the size of a pea, and kept in a bottle.

One to be given in the morning daily. The head, eyes, and nostrils, to be washed with warm milk and water. Or,

Gentian, Ginger, Epsom salts, Flour of sulphur,	equal parts.

made into pills, about the size of a hazel nut, and one given daily.

If you would alter the medicine for a day, a grain of calomel might be given in the summer season, but I should not like to venture it in winter, if the fowl would be much exposed—rue chopped fine and made into pills with butter has been found beneficial. If the fowl from blindness be unable to feed, cram it with pellets of barley-meal, oatmeal, flour, a little mustard, and grated ginger, and give it milk-warm water sweetened with treacle, and keep it near the fire.

THE PIP

Is a disease which frequently proves fatal, particularly to young birds; it is, like the roup, caused by want of cleanliness and comfort; it causes inflammation in the tongue, throat, and beak. If mucous appear on the tongue or throat, you will have to remove it, and give a good bolus of fresh butter, with as much Cayenne pepper as you can take up on a fourpenny piece, and keep warm, clean, and comfortable.

IMMODERATE THIRST

Is to be remedied by a supply of cabbage, lettuce, or other green food, or boiled potatoes with sweet milk.

INDIGESTION

Is frequently caused by voraciously feeding on hard, dry food, such as oats, which having collected in quantity in their crop, requires attention. To cause its removal, the hard, dry food must be carefully discontinued, and soft, watery food substituted, such as mashed carrots, boiled cabbage or greens, or soaked bread and sweet milk, until the crop is entirely softened. If it continue, a dessert spoonful of sweet oil will be necessary; and if still obstinate, 10 grains of jalap, either in ball or liquid.

COSTIVENESS

May be cured by feeding on bread and milk, but if not speedily effectual give a full tablespoon of sweet oil to an adult fowl.

LOOSENESS, OR DIARRHŒA,

Frequently proves fatal, if not speedily attended to. Chalk, mixed with boiled rice and milk, is the best remedy. Alum dissolved in their water, so as to make it a little rough, and the food to be dry grain, &c.

GAPES

Is found to be produced by a congregation of worms in the throat or stomach of chickens or fowls. A little salt, or small quantity of lime in their water, has been found to be successful in dislodging them. Garlic, in clove, but to be nicked, to let out the juice, once or twice a day. A feather twisted in the throat has been often found effectual.

ASTHMA

Is frequently an attendant on recently imported birds, particularly those from warm climates. The cure is warmth, and small doses of hippo in powder, with sulphur mixed with butter.

CONSUMPTION,

Being caused by exposure to damp and cold, a southern aspect, warmth, and good air are the only remedies, and have been frequently found to effect a cure.

FEVER

Is usually brought on by fighting or other irritation. A dose of nitre in milk and water, at night, will relieve them. The food to be light and sparing, but frequent, and if it continue, give a dose of burned butter.

THE HATCHING FEVER,

If it is wished to be abated, should be effected by preventing the hen from occupying a nest, and cooping her where she cannot

form one. Some persons, to effect a cooling of the hen plunge her in cold water, a remedy which I should by no means recommend, as by it you will frequently lose your most valuable fowls, or perhaps produce

RHEUMATISM,

Which is remedied by warmth, and cooling, and opening food.

GOUT

Is difficult to remedy; and the birds being old which it attacks, perhaps may not be worth a trial of success. The remedy is sulphur; it may be given mixed in pellets of bread, or with scalded bran.

APOPLEXY

Frequently attacks over-fed fowls, and if they do not suddenly drop down dead, which frequently happens, appear to have a megrim in the head; they should get, for a full-grown bird, a dessert-spoonful of castor oil, with syrup of ginger and syrup of white poppies, and be confined for a few days, where they will have exercise.

WOUNDS FROM FIGHTING OR OTHERWISE

Should be well cleansed out; and, if badly wounded, ointment of creosote applied, which will be certain to heal them.

FRACTURES

May be remedied by carefully and gently handling them. If a leg be broken, and put in its proper position, and neatly splintered, it will unite sooner than can be supposed; and if a valuable fowl, it is well worth trying the experiment.

THE RUMP GLAND

Frequently becomes obstructed, and inflammation sets in, it swells and occasions pain and uneasiness, extending, in bad cases, to the whole rump. The tumour must be opened, and the collected oil, now become polluted and diseased, squeezed out. If the wound does not heal, apply a little tincture of aloes.

I have purposely omitted any remarks as to

CAPONIZING,

Which, if even successful, I think most cruel and unnecessary, and only calculated to place diseased fowl on the table; and when attempted to be practised, attended with frequent fraud, as the very operator cannot be sure of his completing the experiment, and hence crammed or over-fed fowl are frequently sold as capons, without having the slightest claim to it—a circumstance that cannot be detected, unless by being minutely examined by an experienced anatomist.

IN CONCLUSION,

I beg to say, it is now near half a century since the appearance of the first edition of Moubray, on Domestic Fowl, and although since that time, several new varieties have been introduced, they have been, until a very late period, totally unnoticed—each succeeding book being nearly a servile copy of its predecessor, and some professing originality with less than moderate acquaintance with the subject—until Richardson, an easy writer, whom I induced to commence the subject, and furnished with materials, and my birds to have drawings and engravings made, no one treated of the new varieties, and even the old ones were imperfectly described; but Mr. Richardson not being a practical man, in the way of fowl, has fallen into many errors, when attempting to describe, without the assistance of others, to remedy which, I have been induced to lay, in the foregoing pages, my practical experience, before an enlightened and discerning public, and hope for their indulgence.

THE AUTHOR.

FINIS.